Baltimore City Historic Preservation Design Guidelines

Adopted by the
Commission for Historical and Architectural Preservation
Baltimore City Department of Planning
City of Baltimore, Maryland

Date of Adoption - December 8, 2015

Thomas J. Stosur
Director of Planning

Catherine E. Pugh
Mayor

Table of Contents

Chapter 1: Design Guidelines for Building Exteriors . . . 7
1.1 Identifying and Preserving Historic Building Fabric . . . 7
1.2 Masonry . . . 8
1.3 Wood . . . 13
1.4 Metals . . . 15
1.5 Alternative Materials . . . 17
1.6 Doors . . . 18
1.7 Windows . . . 20
1.8 Roofing and Roof Drainage Systems . . . 25
1.9 Porches, Steps, and Railings . . . 30
1.10 Paint and Color . . . 32
1.11 Lighting . . . 35
1.12 Signage and Awnings . . . 36
1.13 Mechanical, Electrical & Plumbing . . . 38
1.14 Modern Equipment . . . 39
1.16 Accessibility . . . 40
1.17 Lead-Based Paint Hazards . . . 41
1.18 Alterations and Additions . . . 43
Chapter 2: Design Guidelines for Additions New Construction, and Non-Contributing Buildings . . . 45
2.1 Guiding Principles for New Design . . . 45
2.2 Site Design . . . 46
2.3 Scale and Form . . . 47
2.4 Building Features . . . 48
2.5 Materials and Detailing . . . 49
Chapter 3: Design Guidelines for Historic Interiors . . . 51
3.1 General Considerations . . . 51
3.2 Distinctive Interior Features . . . 53
3.3 Distinctive Materials and Finishes . . . 57
3.4 Paint and Color . . . 59
Chapter 4: Design Guidelines for Historic Landscapes . . . 61
4.1 Landscape Types . . . 61
4.2 Landscape Features . . . 63
Chapter 5: Guidelines for Archeology . . . 71
5.1 Archeological Features . . . 71
5.2 Archeological Resources . . . 71

Introduction to Design Guidelines

Baltimore has more than thirty local historic districts and many historically significant neighborhoods. Each historic district and neighborhood has its own distinct character based upon its buildings, uses, and historical development. There are many different sizes, types, and periods of buildings within the wide range of Baltimore historic districts and landmarks.

The Design Guidelines are based on the nationally recognized Secretary of the Interior's Standards for the Treatment of Historic Properties, established as part of the National Historic Preservation Act of 1966, as amended. The Standards provide a philosophical framework that promotes responsible preservation practices. The Secretary of Interior standards were broadly written so that they can be applied to virtually all types of historic resources, including buildings, landscapes, roadways, structures, and archeological sites. They provide an overarching philosophy or approach to sensible preservation planning and decision making. Design Guidelines, however, provide specific direction on how to treat building and landscape features. The Baltimore City Historic Preservation Design Guidelines are based on the treatment standards for Rehabilitation. The Design Guidelines address general issues regardless of historic character; however, they will assist property owners and designers identify issues and craft appropriate maintenance and design solutions for their historic buildings. The Commission will apply these Guidelines strictly or leniently based upon the site conditions and visibility of each project.

Meeting CHAP Guidelines does not necessarily mean that you have met the requirements for other agencies. If a project requires additional approvals for tax credits, grants, easements or similar programs, applicants must also obtain approval directly from the appropriate agencies, such as the Maryland Historical Trust or the National Park Service.

How to Use the Guidelines

The Design Guidelines will assist property owners when considering changes to historic structures. Property owners should review them as they plan for needed changes and should also consult with staff. Using the Guidelines will help preserve the historical and architectural integrity of neighborhoods and structures.

The Guidelines are divided into five chapters and each chapter is divided by topic. The Guidelines address appropriate treatments for materials and architectural features.

Clockwise from upper left: Street view of Charles Village National Register Historic District, B'Nai Israel Synagogue, street view of Loft Baltimore City Historic District, the former Northern District Police Station.

Chapter 1:
Design Guidelines for Building Exteriors

The following Design Guidelines will help enhance, preserve, and protect Baltimore's unique character by respecting the historical significance, integrity, and architecture of each building and its setting. The Design Guidelines encourage rehabilitation and new construction projects within the City's historic districts to be compatible with the character of their neighborhoods. With a wide array of building types, architectural styles, and open spaces, the unique qualities of each landmark and historic district contribute to Baltimore's rich and diverse urban environment.

1.1 Identifying and Preserving Historic Building Fabric

The following principles will help property owners identify historic fabric and preserve their historic structures:

- Identify and assess character-defining features when considering changes to a historic building. Retain character-defining features, such as roof shape, openings for doors
- and windows, and unique detailing, when repairing, maintaining, or altering a historic building.
- Repair deteriorated historic fabric rather than replace it whenever possible. Do not modify or alter significant architectural features during the repair process.
- Thoroughly consider all alternatives to replacing deteriorated building features. There are a number of recognized preservation repair techniques.
- Replace architectural materials and features that are deteriorated beyond repair with new materials and features that match the original.
- Replace missing architectural features with new features that match the original. Base the fabrication of the new features on matching identical features from the building. Where identical features are not present, base the fabrication on historic drawings, photographic evidence, or comparable examples found on historic buildings in the neighborhood.
- Many changes to a building over time may be historically significant and should not be removed. Intrusive changes that have resulted in harm to historic building fabric or in the loss of historical significance and integrity may be reversed as part of a rehabilitation project.
- Use craftspeople experienced in restoration of historic buildings.
- The Commission takes lead-based paint hazards very seriously. For projects that propose the alteration or removal of features contaminated with lead-based paint, the Commission will take into account the significance of the finish or feature in question, what impact an abatement proposal will have on the historic character of the building, and the requirements of applicable federal, state, and local laws in the project review. For this and more information on lead-based paint hazards, please refer to the Lead-Based Paint Hazard Section.

From left to right: Street view of Bolton Hill Baltimore City Historic District, Baltimore City Jail Warden's House, Cathedral Hill National Register Historic District.

1.2 Masonry

Brick and stone masonry comprise the majority of Baltimore historic buildings, defining their style, character, and appearance. Most buildings built before the twentieth century have load-bearing masonry walls, making their maintenance critical for structural stability. Many commercial and industrial buildings constructed during the twentieth century have only a thin veneer of masonry supported by an interior steel frame. Maintenance of the masonry veneer is important to prevent rusting of embedded steel.

Brick, the most common masonry material in Baltimore, varies considerably in color, texture, and quality, depending upon materials and manufacture. Bricks are baked, creating a hard outer crust that protects a soft interior. Although bricks last a long time, they're still vulnerable to deterioration and will rapidly deteriorate without a hard outer crust.

Baltimore has a variety of stone buildings. The earliest masonry buildings were constructed with a blue-gray gneiss quarried along the Jones Falls. Rowhouse steps built with white Cockeysville marble have become a Baltimore icon. Seneca Red sandstone from Frederick became popular for lintels, window sills, and wall caps. Brownstone and granite buildings also became popular in the nineteenth century. In the early twentieth century, Indiana limestone enjoyed popularity for commercial buildings. Natural stone varies in composition and durability. Identifying stone type is essential when considering treatment options.

The twentieth century saw the use of concrete as a prominent building material. Concrete gained popularity because of its versatility, durability, and high quality. Concrete can serve both utilitarian and ornamental function. The Shelley House, a Baltimore City Landmark, is one of the first houses in the City that was constructed entirely of reinforced concrete. Deterioration typically occurs as a result of corrosion of the steel reinforcement or improper construction.

Masonry walls and mortar joints should be carefully inspected for signs of deterioration. Masonry is porous and must be protected from water infiltration by maintaining proper roofing, building and site drainage, and sound mortar joints. Water infiltration causes damage through cycles of freezing and thawing and by extracting salts from the masonry. Cleaning, repointing, and surface treatments must be undertaken with extreme care to avoid permanent damage.

1.2.1 GENERAL

- Inspect masonry walls for signs of cracking, spalling, open joints, movement, discoloration, and interior dampness. Determine the source of problems.
- Prevent water from entering masonry walls by maintaining roof, building, and site drainage, and sound mortar joints.
- Where serious cracking or deterioration is observed, consult a structural engineer experienced in historic preservation to investigate possible structural issues.
- Do not cut new openings or remove substantial portions of masonry walls.
- In most cases, do not apply waterproofing or other surface coatings over historic masonry. Most coatings prevent the masonry materials from breathing and can trap moisture within the wall, which causes cracking, spalling, and movement. See the Guidelines for masonry painting below.
- When repairs to corroded metal embedded in masonry are completed, the repaired surface of the masonry should match the original appearance of the surface.
- Masonry walls must be properly supported when digging next to them.

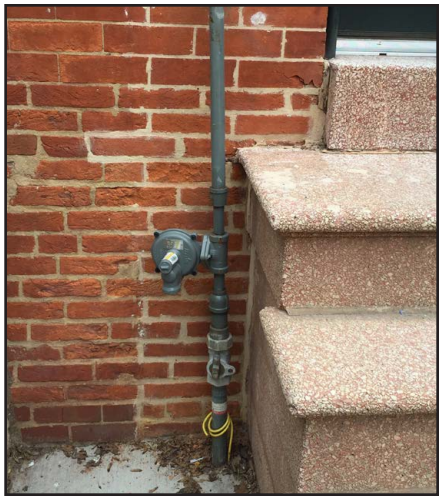


Figure 1: NOT RECOMMENDED *- Example of brick wall with deteriorating mortar, water damage, and inappropriate repointing.*

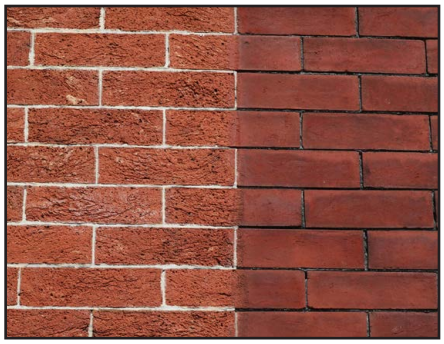


Figure 2: *Adjacent properties showing the difference between brick that has been sandblasted (left) and intact historic brick (right)*

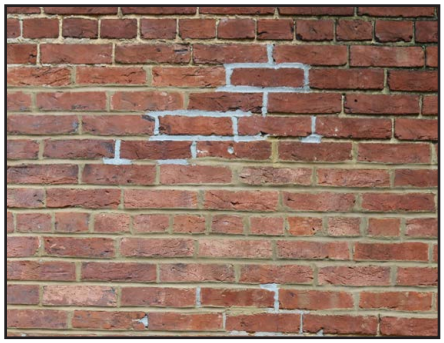


Figure 3: NOT RECOMMENDED *- Numerous inappropriate mortar types and tooling at historic masonry wall.*

1.2.2 MASONRY CLEANING

- Clean masonry when heavy soiling causes deterioration.
- Use the gentlest means possible when cleaning, such as a low-pressure water spray (100-400 psi) and natural-bristle brushes. Under-clean rather than over-clean.
- Only use proper commercial masonry cleaning agents. Follow manufacturer's instructions.
- Test cleaning methods in a small area. When possible, allow the test area to weather for several months.
- Do not blast water at high pressure (over 400 psi). Never Sandblast.
- Repoint first and clean second, in order to limit water penetration during the cleaning process.
- Clean masonry when temperatures will remain above fifty degrees Fahrenheit for at least three days after the completion of cleaning.

1.2.3 MORTAR

- Mortar joints deteriorate faster than masonry and must be periodically repointed.
- Repoint deteriorated joints only. The removal of all joints in order to achieve a uniform appearance is discouraged as this often results in damage to historic masonry.

- Remove unsound mortar joints carefully with hand tools that are narrower than the joint. Under special circumstances and careful supervision, use of power tools may be permitted. Require test samples for approval prior to beginning work. Do not damage masonry units.
- Remove unsound mortar to a depth of two-and-one-half times the width of the joint, or to sound mortar, whichever is greater.
- Replacement mortar should be compatible with historic masonry and the original mortar mix. Portland cement mortars are not appropriate for buildings constructed prior to c. 1900. Modern mortar mixtures tend to be harder than historic masonry and mortar, causing cracking of the masonry units during the freeze-thaw cycle, whereas historic mortar mixtures acted as "sacrificial" materials that were able to absorb such changes with no damage to the masonry. Develop a mortar mixture that uses similar sand and iron-oxide mortar pigments.
- Replacement mortar must match historic mortar joints in color, texture, joint size, profile, and hardness. Do not use synthetic caulking compounds as an alternative to mortar.
- Major repointing projects should be undertaken by a masonry restoration professional. Historic mortar testing can be easily and inexpensively completed by trained material conservators.
- Repoint open and deteriorated mortar joints in brick masonry to match existing.

Figure 4: NOT RECOMMENDED - *Inappropriate repointing following the removal of historic door surround.*

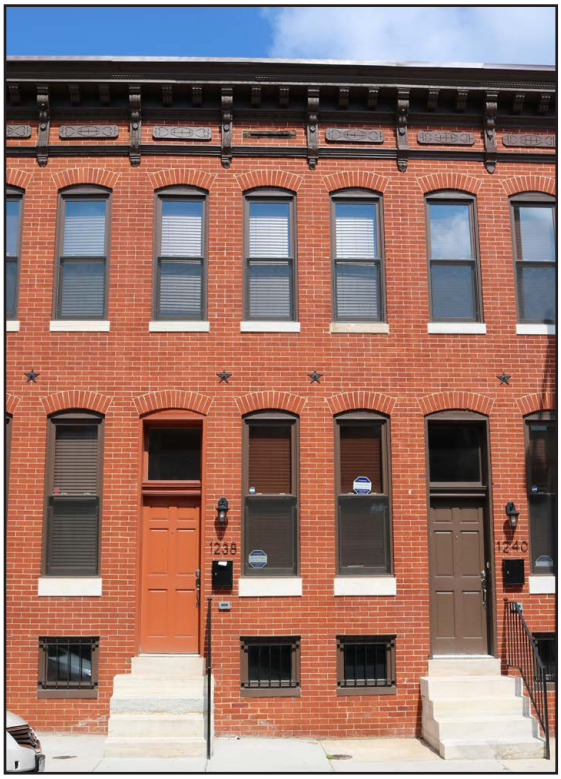


Figure 5: RECOMMENDED - *Repointed brick that replicates the color, texture, composition, and tooling of the historic mortar.*

1.2.4 BRICK

- When patching or repairing a section of a brick wall, match the existing brick in color, size, and texture, as well as the existing wall in pattern and profile. If new brick is required, piece-in new brick masonry into existing. Match existing joints in color, texture, joint size, and profile. A test panel may be required for approval.
- Remove each cracked or spalled brick individually and replace to match existing. Replacement brick must not be stronger than the original brick.

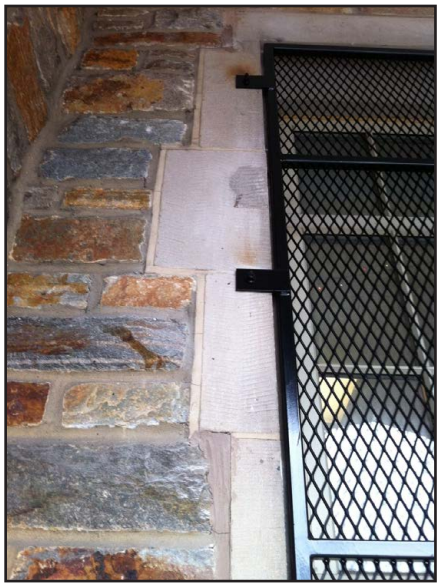


Figure 7: NOT RECOMMENDED - *Installation of metal grille into stone rather than mortar joint and improper repointing.*

Figure 8: NOT RECOMMENDED - *Discoloration and deterioration of historic stonework due to water damage.*

Figure 9: RECOMMENDED *- Repointing of stone using appropriate mortar.*

1.2.5 STONE

- Inspect for, and repair, open joints, especially at parapets, cornices, lintels, string courses, and water tables.
- Deterioration occurs more rapidly on horizontal masonry surfaces than on vertical surfaces; therefore a water repellent treatment may be appropriate.
- Do not use sealants in joints on vertical surfaces.
- Repair cracked, spalled, and deteriorated stone masonry units through patching, piecing-in, or consolidation methods whenever possible. The patching materials must be physically and chemically compatible with the historic masonry unit.
- Replace extensive deteriorated or missing features with new stone to match existing stonework in color, size, texture, coursing, and pattern. Require test panels for approval of all types of masonry repairs.
- Only remove or rebuild substantial portions of stone masonry walls for structural integrity reasons.

1.2.6 STUCCO

- Inspect stucco finishes on a regular basis to note cracks, openings, intrusive vegetation, staining, or hollow sounding areas. Inspect for leaking downspouts or gutters that may be exacerbating damage to stucco.
- Use a stucco mix similar to the original stucco to repair cracks. Do not use sealant to repair cracks in stucco.
- Remove and repair deteriorated areas only.

Figure 6: NOT RECOMMENDED - *Inappropriate use of stucco on an historic masonry building.*

- Match existing adjacent surfaces in strength, composition, color, texture, and finish. Use an approved test panel to ensure that new work will match existing.
- Install stucco repairs when the temperature will remain above fifty degrees Fahrenheit for a minimum of three days after installation.
- Remove stucco from masonry surfaces where it is historically inappropriate. Before removing stucco, prepare a test panel to make sure that underlying masonry has not been irreversibly damaged.
- Do not paint stucco that has never been painted.
- Do not install modern exterior insulation finish systems (EIFS) as a replacement for stucco.

Figure 10: RECOMMENDED - *Restoration of stucco at 1 W. Eager St.*

Figure 11: RECOMMENDED - *Stucco finish in good condition in Cedarcroft National Register Historic District*

From left to right: House in Better Waverly Baltimore City Historic District, Weaver House Baltimore City Landmark, Wolfe Street Wooden Houses Baltimore City Landmark.

1.3 Wood

Wood has been used for structural framing, exterior siding, and details such as porches, shutters, steps, handrails, window hoods, cornices, finials, etc. These features are among the most striking and unique aspects of historic buildings. Wood windows and doors are addressed in separate sections.

Wood has always been painted for protection and has always required regular maintenance. Although wood is durable when well-maintained, it quickly deteriorates when exposed to weather. Architectural details are particularly vulnerable where they project from exterior walls, have complex designs, or are located in hard to access areas such as the cornice Unfortunately, deteriorated wood details are often removed rather than repaired or replaced.

1.3.1 GENERAL

- Inspect non-structural wood elements for peeling paint, open joints, water penetration, rot, fungus, and signs of insects or animals. Inspect structural wood elements by carefully examining interior elements associated with the walls, particularly floor and roof framing that may be covered with finishes. Early detection and action can avoid extensive and costly repairs later on.
- Keep painted coatings in good repair to protect wood surfaces from ultraviolet light, moisture, and the elements. Filling, priming, and painting cracks can remedy many problems.
- Reduce wood deterioration by repairing faulty flashing, leaky gutters, and other sources of water penetration. Remove plant material from wood features.
- Repair wood features using recognized wood preservation techniques, such as patching with appropriate patching materials, piecing-in, and consolidation methods.
- Only replace wood features that are deteriorated beyond repair. The Commission may consider the removal of lead-based paint hazards on wood features that

Figure 12: *Typical decorative wood cornice on an Italinate style rowhouse.*

are accessible, impact, or friction surfaces. Applicants must present test results that demonstrate the presence of lead-based paint on the feature. Replace deteriorated wood features or features that have been determined to be lead-based paint hazards with matching new wood features. For more information, please see the Lead-Based Paint Hazards Section.

- Photograph architectural features that are slated for replacement prior to their removal.
- Use historic documentation, physical evidence including comparable examples in the neighborhood, or photographs to accurately replicate missing features. If such documentation is not available, use a contemporary design compatible with the size, scale, and material of the historic building.
- When in-kind replacement is not possible, an alternative material may be considered if it is approved by the Commission. For more information, please refer to the Alternative Materials Section.
- Do not install insulation within the exterior walls of wood frame construction without a proper vapor barrier at the inside surface. Without a vapor barrier, the insulation will absorb water from warmer, interior spaces, trapping moisture within the walls.
- Install sealant at vertical joints where wood meets a dissimilar material. Do not apply sealant to horizontal wood joints because it will trap moisture and cause deterioration.

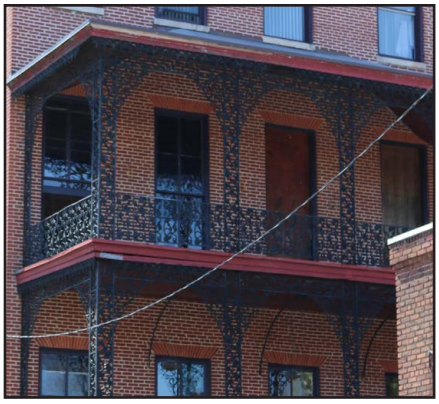
1.3.1 WOOD SIDING

- Retain original wood siding where it is in good or repairable condition.
- Where the replacement of siding is approved by the Commission, new siding should match the historic wood siding in shape, profile, finish, design, detail and dimension.

Figure 13: NOT RECOMMENDED - *Use of vinyl siding over historic wood siding.*

Figure 14: *Historic wood shake siding.*

- Fiber Cement siding may be appropriate where it accurately replicates the visual and aesthetic qualities of the historic wood siding. Other siding materials will be evaluated on a case-by-case basis. For more information, please refer to the Alternative Materials Section.
- The covering or replacement of existing wood siding with new vinyl or aluminum siding is not permitted.



From left to right: Metal railing and columns in Bolton Hill, typical metal decorative window grille, refurbished fence at the Washington Monument.

1.4 Metals

Metal can be cast or shaped into a variety of building elements. Before 1850 wrought- and cast-iron were used to produce handrails, balconies, and gates. Mid-nineteenth-century technological breakthroughs in iron production led to the production of metal cornices, roof cresting and finials, window hoods, columns, piers, and storefronts. Early twentieth-century buildings used bronze, aluminum, chrome, and Monel (a group of nickel alloys) for decorative detailing. Metals used in doors, windows, lighting, and roofing will be dealt with in separate sections.

Metals, inherently durable if properly maintained, weather, oxidize, and corrode if exposed to water. Historic Metal features are frequently neglected, covered up, or removed, particularly at roofs and cornices that are difficult to access. In many cases, covering these features accelerates the damage, causing condensation and corrosion. Inspections of metal elements should identify the type of metal and signs of deterioration such as loose or missing elements, open joints, rust or rust staining, and failed fasteners or soldered joints.

Figure 15: *A metal turret in Reservoir Hill.*

1.4.1 GENERAL

- Retain and repair existing metal features whenever possible. Repair metal surfaces using methods, materials, and techniques appropriate to the specific type of metal.
- Replace only those portions of metal features that exhibit significant deterioration. Replace materials and features in kind, whenever possible.
- When in-kind replacement is not possible, a compatible substitute may be used. Replicate existing features in size, form, shape, texture, and appearance. Do not replace deteriorated metal features with materials that do not have the same visual integrity. Proposed alternative materials must have equal or better durability than the original material. For more information, please refer to the Alternative Materials Section.
- Replace missing metal features with new elements based on

historical, pictorial, or physical evidence. If no such evidence is available, replacement features should be of a compatible new design, rather than a conjectural historical reconstruction. New metal features should be compatible in size, scale, material, and color with the historic building.

- Clean and repair metals requiring a painted finish prior to repainting. Use a paint system appropriate to the specific metal surface.
- Do not apply paint coatings to metals that were historically meant to be exposed, such as copper, bronze, or stainless steel.
- Do not leave metal surfaces that require protection from the elements exposed, such as steel, iron, or tin.

Figure 16: NOT RECOMMENDED - *A metal bay window with peeling paint, but in otherwise good condition. If this remains unpainted the metal will deteriorate.*

1.4.2 CLEANING

- Do not damage the historic color, texture, or patina of metal features when cleaning. Clean metals using the gentlest means possible. Prepare a test panel to determine appropriate methods and potential adverse effects from cleaning.
- Do not use blasting methods to clean soft metals, such as tin, lead, copper, and zinc. Clean these soft metals using appropriate cleaning agents for the specific type of existing metal.
- Remove corrosion or paint build-up on hard metals, such as cast iron, wrought iron, and steel, using a wire brush and appropriate paint stripper. Low pressure grit blasting may be used if the metal elements can be taken to a shop for repairs.

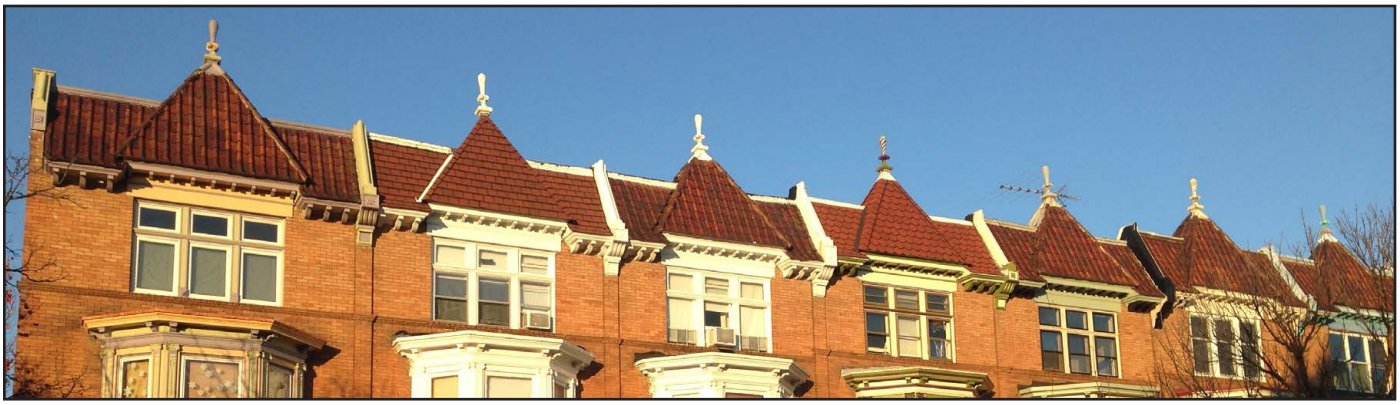


Figure 17: *Roofs in Charles Village show a variety of inappropriate replacement materials along with the historic red tile roofs.*

1.5 Alternative Materials

Where a historic feature is entirely missing or where replacement has been approved by the Commission, a visually and physically compatible alternative material may be used, if approved by the Commission. Replicate elements in size, form, shape, texture, and appearance of the historic feature. Non-historic building elements may be replaced with new energy efficient, water saving, or recycled/recyclable materials that are compatible with the remaining historic fabric. Certain materials are not considered appropriate and are noted in the Guidelines as such.

Figure 18: *A mix of historic and appropriate modern wood replacement windows that accurately replicate the historic wood windows in the Bolton Hill Local Historic District.*

In considering alternative materials, the Commission will review:

1. Samples of the material; and
2. Product literature, including information on the expected lifespan and durability of the material; and
3. Ability to accurately replicate the visual and aesthetic characteristics of the historic material in the specific application requested; and
4. The location of the feature and its visibility from the street; and
5. The level of detail, significance or uniqueness of the feature being replaced.
6. Where economic hardship is a consideration, the cost of the alternative material relative to the original material. Please refer to the Economic Hardship Procedures for more information.

The Commission may request a mock-up of the product installed in the requested location to determine how it will appear on site.

Figure 19: RECOMMENDED - *The renovation at the Gertrude Stein House utilized fiber cement siding and PVC trim details to recreate the historic wood siding and trim, which was missing at the time of the renovation.*

Left to right: Typical single-light door, highly decorative double-leaf door, typical double-leaf door, decorative double-leaf door.

1.6 Doors

Doors and entryways are among the most visible character-defining features of a historic building. Significant features of doors and doorways include materials, shape, panel arrangement, shutters, moldings, hoods, fanlights, and sidelights. Many original doors are characteristic of a period or regional building style and are examples of exceptional craftsmanship or design. Replacing doors is generally unacceptable.

Doors and entryways are most commonly damaged from constant use. Over time, small problems, such as sticking doors, missing fasteners, broken glass, or worn finishes, can lead to more serious deterioration. Wood and metal doors are vulnerable to moisture and de-icing salts which accelerate wood rot and corrosion. Maintenance of doors and entry ways include regular cleaning, rust removal, limited paint removal, glass repairs, and the application of protective coatings.

1.6.1 GENERAL

- Preserve, repair, and maintain historic doors, doorway and entryway features that contribute to the building's architectural character, such as hardware, fanlights, sidelights, pilasters, entablatures, columns, balustrades, and stairs.
- Do not paint door hardware.
- Installation of new storm doors is allowed; however, they must match the shape of the opening, have a narrow-frame design that enables the inner door to be seen, and have a finish that matches the inner door.
- Do not remove historic doorway elements or add elements. Retain historic vestibules, trim, tile work, and transoms. Repair transoms when broken.
- Do not create new entrances on primary facades. Locate new openings on walls that will result in the minimal loss of historic materials and features. Design new openings to be compatible

Figure 20: NOT RECOMMENDED- *An inappropriate contemporary door in an historic door opening.*

in size, scale, shape, proportion, material, and massing with the existing building features.

- Use historical documentation when reconstructing a missing door feature. If there is not sufficient evidence available, a new design must be compatible with the architectural character of the building.
- Do not fill in historic door openings. This destroys the rhythm and balance of the building, as well as historic materials.

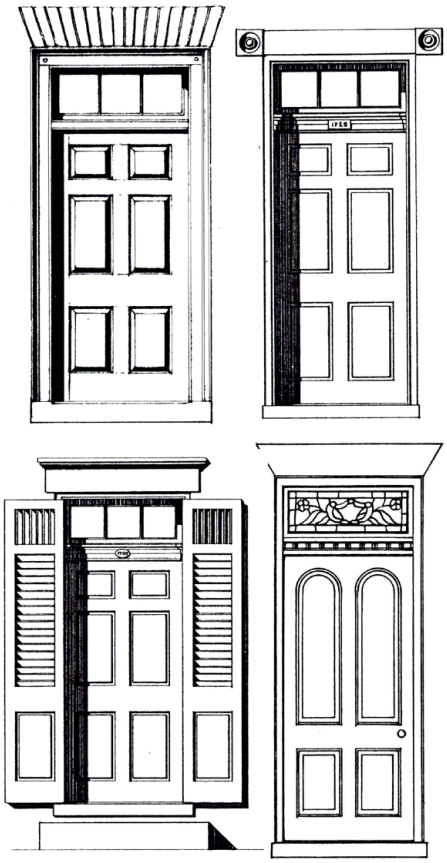


Figure 21: *Typical rowhouse door styles.*

1.6.2 DOOR REPLACEMENT

- Never replace a door if repair and maintenance can improve its performance, eliminate a lead-based paint hazard on an accessible, friction or impact surface, and preserve its physical and historical integrity. For more information, please see the Lead-Based Paint Hazards Section.
- Use only doors that duplicate the design, proportion, arrangement of paneling, and glazing of the original. Doors with glazing should match the historic glazing in overall size, muntin profile and dimension, and arrangement.
- Replace non-original, non-historic doors with new doors that are appropriate to the period and style of the building.
- Replicating the material of a historic door is always appropriate. A replacement door in an alternative material may be considered if it adequately replicates the overall design, proportion, arrangement of paneling, and glazing of the original door. For more information, please refer to the Alternative Materials Section.
- Maintain the original shape and size of the historic doorway. Do not decrease the size of the doorway opening by partially filling it in to allow for stock replacements.
- Do not replace historic double-leaf doors with a single door.

Left to right: Unique curving window in Mount Vernon Baltimore City Historic District, bay window in Reservoir Hill National Register District, decorative arched windows in Lauraville National Register Historic District, oversized double-hung windows in Mount Vernon.

1.7 Windows

Like doors, windows are one of the most noticeable features of a building, contributing to a building's sense of massing, proportion, and rhythm. Details, such as size and shape of window panes, depth and width of frames, and color and type of glazing, dramatically affect a building's appearance. There are a wide variety of historic window types including, but not limited to, double-hung, fixed, awning, and casement windows.

Historically, windows have been the sole means for providing air and light into living spaces. For centuries, builders and glass makers worked to increase the size of window panes (sometimes called lights or lites). Expense and technology necessitated that most windows were built with multiple panes supported by wood or metal dividers called muntins. These muntins were mounted into sashes and hung on multiple tracks to allow the windows to be opened. Today, the existence of electric lights and air conditioning makes it difficult to imagine the importance of windows in earlier centuries. Until the mid-twentieth century, the need for light and air strongly influenced building forms and window placement.

Historic windows should not be replaced unless they are deteriorated beyond repair. Replacement may be considered for lead-based paint hazards on accessible, friction or impact surfaces. Replacement windows must meet CHAP Window Replacement Guidelines. For more information, please see the Lead-Based Paint Hazards Section. When properly maintained, windows can last indefinitely. Historic windows are designed with component parts that can be disassembled and individually repaired unlike contemporary replacement windows, which are a single unit. Historic windows are generally found to be better constructed than contemporary windows which have a limited lifespan.

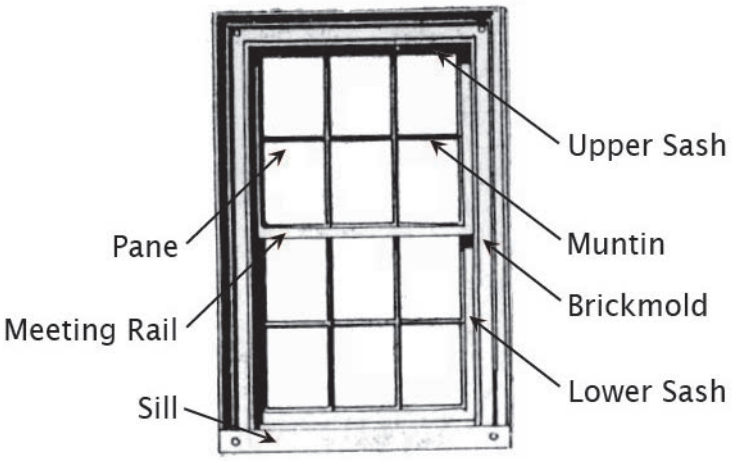


Figure 22: *Parts of a window.*

The replacement of historic windows is often advocated to improve energy efficiency or to fulfill sustainability goals. Most heat loss, however, occurs around a leaky window frame or sash rather than through the glazing. This can be addressed through simple weatherization techniques, such as installing weather-stripping or exterior or interior storm windows, which greatly increase energy efficiency at a substantially lower cost than wholesale window replacement.

Figure 23: RECOMMENDED - *Example of appropriate replacement windows.*

Historic buildings typically display a high quality of design and materials that should be retained. Special windows that are custom designed or crafted, or that represent a high degree of styling or detailing warrant special care and every effort should be made to preserve them. Elements that were mass-produced, do not have distinguishing characteristics or that are easily replicable may be considered for replacement if they are a lead-based paint hazard. Replacement windows must follow the existing CHAP Guidelines for Window Replacement.

Some examples of special windows include stained glass windows, windows with curved glass, arched windows, and windows of unusual configurations. Every effort should be made to repair and eliminate lead-based paint hazards on special windows. If a special window is deteriorated beyond repair or a lead-based paint hazard cannot be eliminated without removal, any replacement window must meet the CHAP Guidelines for Window Replacement. For special windows, there are other methods of risk reduction aside from replacement.

Figure 24: RECOMMENDED - *Example of appropriate repair of historic wood window.*

1.7.1 GENERAL

- Do not alter the size, location or shape of historic windows or window openings.
- In most cases, do not create new window openings or permanently block existing window openings on principal elevations.
- When required, locate new window openings on a secondary elevation that cannot be seen from a public right-of-way. Design newly installed windows to be compatible with historic windows and the overall character of the building.

- Do not install new interior floors or suspended ceilings that block the glazed area of historic windows. If such an approach is required, design new floors and ceilings with setbacks that do not directly obstruct the window.
- Do not cover historic window frames, sills or trim with metal or vinyl siding materials.
- Do not cover or paint the glass in windows, transoms, or sidelights.
- Retain historic transom windows and trim over windows. Repair transom glass when broken. New transoms must match the historic transom is size, shape and material. New stained glass may be installed in transoms where there is a historic precedent on the building.
- Window screens and storm windows may be installed. The frames should be of a low profile and be painted to match the window frame.
- Painted screens are a significant part of Baltimore's historic streetscapes. Retain and repair historic painted screens whenever possible.
- Do not alter the window sash or frame to accommodate an air conditioning unit.
- Use physical, photographic or historical evidence to reconstruct missing window elements, such as architraves, hoodmolds, sash, sills, and interior or exterior shutters and blinds. Reconstruct elements with materials to match the original or, if that is not possible, with a compatible substitute material.
- Lead paint is an extremely hazardous material. Applicants must follow Maryland Department of Environment's Lead Poisoning Prevention Program and all federal, state, and local laws pertaining to the safe removal of lead paint. Contractors must be certified by the Maryland Department of the Environment and accredited by the U.S. Environmental Protection Agency.
- When hiring a window repair or replacement contractor, it is recommended that they have experience working in historic districts.

1.7.2 WINDOW REPAIR

- Repair deteriorated window components whenever possible. Do not replace historic windows unless they are deteriorated beyond repair. Replacement may be considered for lead-based paint hazards on accessible, friction or impact surfaces. Replacement windows must meet CHAP Window Replacement Guidelines.
- Every effort should be made to maintain and repair "special" windows.

Figure 25: NOT RECOMMENDED
An example of a window that is deteriorated beyond repair.

Figure 26: NOT RECOMMENDED
An example of an inappropriate replacement window.

Figure 27: NOT RECOMMENDED
An example of a replacement window that is too small for the historic masonry opening.

- Perform routine window maintenance, including repainting (interior and exterior), installing new glazing putty, weather-stripping, and repairing sash, frame, and hardware.
- Repair wood windows by patching, splicing, consolidating, and reinforcing existing materials. Deteriorated wood sills can be repaired using epoxy consolidants and wood fillers. Repairs may include in-kind replacement of parts that are extensively deteriorated or are missing. Damage to one component of a historic window does not require the removal of the entire window. Most millwork firms can duplicate parts for window repairs. Consult a window repair specialist prior to commencing a repair project.
- Repair metal windows by removing light rust with the gentlest mechanical or chemical methods possible. Do not attempt to burn off rust with a propane torch or similar method, which can distort the metal and result in broken glass. Bent or bowed metal sections should be taken to a professional metal fabricator's shop for repairs.
- If the window sash or frame must be disassembled for repair, consult an experienced window specialist to avoid damaging the window.

Figure 28: *The house on the left replaced the windows and replicated the historic windows with a two-over-two configuration. The house on the right replaced the windows and installed inappropriate four-over-four windows.*

- Windows that appear to be in poor condition may be repairable. Removal of excessive layers of paint can improve window operation and restore original detailing.
- Substitute materials or parts must match the visual appearance of the existing window and must not be physically or chemically incompatible.

1.7.3 WINDOW REPLACEMENT

Window replacement Guidelines apply when the Commission has determined:

1. An existing, historic window is deteriorated beyond repair;
2. An existing, historic window is a lead-based paint hazard;
3. The existing window does not contribute or is detrimental to the historic character of the building;
4. A window is being installed in a historic window opening that was later in-filled with brick, concrete block, or another material that is not in keeping with the historic character of the building.

- Replacement windows shall match the historic windows in size, type, configuration, form, detail, and overall appearance.

- Replicating the material of historic windows is always appropriate. Replacement windows in an alternative material may be considered if it adequately replicates the overall size, glazing, operation, finish, exterior profiles, and arrangement of the historic window.
- Replacement windows must fit properly within the original opening, and replicate the dimensions and profiles of the sash, frames and muntins. Do not reduce the size or change the shape of historic windows or window openings.
- Insulated glass and clear low-emissive (Low-E) coatings may generally be incorporated into the design of a replacement window.
- Windows that were mass-produced, do not have distinguishing characteristics or that are easily replicable may be considered for replacement if they are deteriorated beyond repair or present a lead-based paint hazard on accessible, friction or impact surfaces.
- Where sashes are deteriorated beyond repair, repair the frames and install new sashes within them. Eliminate any friction or impact surfaces that have tested positive for lead. Visibly match the amount of glazing area of the original window.
- Simulated divided light muntins may be allowed, so long as they:
    1. Match the historic window muntin in profile and depth on the exterior and interior side of the window to the greatest extent possible;
    2. Include an interior space bar within the insulated unit that visually divides the interior and exterior grilles; and
    3. Are integral to the window sash.
- Snap-on muntins, removable grilles, and grilles between the glass are not acceptable.
- CHAP may apply these standards strictly or leniently based on site conditions.

Left to right: House in Lauraville National Register Historic District, Greenway Cottage Baltimore City Landmark, Mount Vernon

1.8 Roofing and Roof Drainage Systems

The roof is among the most critical elements of a building. The roof (composed of framing, sheathing, flashing, and roofing materials) and the roof drainage elements (including drains, downspouts, gutters, boots, etc.) must be considered as one system. Providing a weather-tight roof and properly functioning drainage system should be addressed before any other concern. In many cases, a roof's shape, height, configuration, materials, and decorative elements help define the architectural style of a building.

Baltimore buildings display many different roof types. Many rowhouses and commercial buildings have shed or slanted-flat roofs, typically covered with inexpensive, asphalt-saturated roofing. Late-nineteenth-century buildings have elaborate features such as mansards, cupolas, dormers, finials, cresting, and decorated cornices, with complicated valleys and flashings. Slate, terracotta, and metal roofing, including sheet and corrugated iron, galvanized metal, tinplate, copper, lead, and zinc, were all popular roofing materials used on historic buildings.

If roofing is not properly maintained, damage that occurs to concealed roof and wall structures may go unnoticed for years. As a result of water infiltration, wood members will rot (especially important at bearing points), metal elements will rust and expand, and masonry will deteriorate and crack. By the time these conditions become apparent, the required repairs will be much more costly than proper maintenance would have been.

Whenever possible, traditional materials should be used for historic roof repairs. Introducing contemporary materials may trigger new problems and alter the building's character. Traditional roofing materials have a long life that makes them more economical over the long term. For instance, a slate roof may last more than a hundred years and a metal roof may last for sixty years. The average asphalt shingle roof, by contrast, lasts about twenty years.

1.8.1 GENERAL

- Preserve roofs that are significant to a building's historic character, which may include form, shape, materials, and decorative features such as gables, finials, towers, turrets, dormers, and chimneys.
- Only remove roof elements that are not historic.
- Severely deteriorated roof features should be replaced to match existing features in size, form, shape, color, and materials identical to the originals.

- Leave historically-exposed rafter ends and eaves open and uncovered.
- In most cases, rooftop additions, decks, and terraces easily seen by the public at the front of the building are not permitted in a historic district. Rooftop additions, decks, and terraces visible from a rear secondary street or alley may be approved.

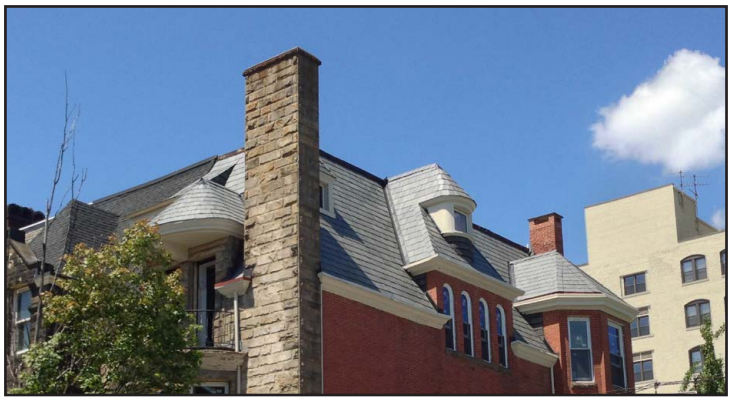


Figure 29: RECOMMENDED - *The deteriorated slate roof was replaced using Tru-Slate, an innovative option when slate replacement is required.*

1.8.2 ROOF REPLACEMENT

- Replace historic roofing materials with materials that match the existing roofing whenever possible.
- When replacing roofing, remove all existing roofing material and inspect and repair roofing substrates, such as wood and felt.
- During roof replacement, protect adjacent historic features such as parapets, cornices, windows, trim, and chimneys from damage during construction.
- Replace historic metal roofs in kind. Paint terne metal roofing to prevent corrosion. Copper roofs may be left unpainted.
- Replacement metal roofing must match the original layout, configuration, and appearance of the seams and trim.
- When in-kind replacement is not feasible, install alternative materials that are visually physically, and chemically compatible with the historic roof materials. New materials must match historic materials in color, texture, size, shape, profile, and general appearance. The use of alternative roofing materials will be reviewed on a case-by-case basis.
- Flat or gently sloping roofs not visible from the ground may be replaced with appropriate contemporary roofing systems.

1.8.3 ROOF MAINTENANCE AND REPAIR

- Inspect roofs on an annual basis to ensure all roof surfaces, flashing, gutters, and downspouts are watertight and draining properly. Clean gutters, flashing, and downspouts every spring and fall at minimum to remove leaves and debris. Check that flashing is intact at parapets, chimneys, dormers, and projections as well as along valleys created by intersecting slopes.
- Selectively repair deteriorated sections of historic roofing material rather than completely replacing the roof, whenever possible.
- Repair leaking roofs as soon as possible. Install temporary repairs until permanent repairs can be made. If repairs are not made quickly, adjacent building materials will rapidly deteriorate.

1.8.4 ROOF RECONSTRUCTION

- Reconstruct missing roof features using physical and/or historical documentation. When sufficient documentation is not available, design new roofs to be compatible with the architectural character of the building.
- Document any existing historic roof feature that is slated for replacement or reconstruction with photographs prior to the removal of any historic fabric.

Figure 30: *Example of chimney deterioration.*

1.8.4 CHIMNEYS

- Hire a professional experienced in historic masonry and chimney structures when undertaking chimney repair or replacement.
- Retain ornamental brickwork, corbelling, and other decorative features during chimney repair (see the Masonry section in this document).
- Cap unused historic chimneys with an appropriate material, such as flagstone or terracotta, to keep water out.
- Immediately address any signs of chimney movement, cracking, or leaning as it can lead to serious structural and life safety problems. If a chimney appears unstable, consult a structural engineer to determine an appropriate treatment. Replace chimneys that are unstable and cannot be repaired.
- If chimney replacement is required, document the chimney with measured drawings and photographs before dismantling it. Dismantle and salvage existing materials if possible. Reconstruct the chimney to match the original.
- Where chimney caps are a visible design detail, replace the historic materials to match existing.

1.8.5 GUTTERS AND DOWNSPOUTS

- Trim overhanging tree branches where they touch roofs and gutters.
- Replace missing downspouts as quickly as possible to avoid damage to walls, trim, foundations, and interiors.
- New gutters and downspouts, when required, must match existing historic gutters and downspouts in profile, color, and finish.
- Preserve and retain historic building details when installing replacement gutters.
- In most cases do not install new gutters and downspouts on buildings that have retained internal drainage systems. Repair and maintain the internal drainage systems.
- New gutters and downspouts may be installed on existing buildings where they have not existed historically when the gutters and downspouts will prevent damage to other
- Historic building features such as masonry walls and trim. Select gutter and downspout styles, materials, and layouts that are appropriate to the character of the roof edge,

cornice, or trim and minimize the visual change. Half-round gutters and downspouts are generally preferred. K gutters may be used in appropriate residential applications.

- If built-in box gutters are to be replaced by hanging gutters, the box gutters must be properly abandoned and covered and the hanging gutters attached to the fascia board at the eaves of the roof.
- Never install vinyl gutters and downspouts, which have a short life expectancy.
- Install an appropriate type and a sufficient number of fasteners (hangers, brackets, anchors) to attach the gutters and downspouts securely to the roof and wall. Gutter or downspout guards may reduce the collection of organic matter in gutters and downspouts.
- Install underground drainage systems, grading, splash blocks, diverters, and/or French drains under downspouts to carry water away from the building foundation and limit soil erosion.

1.8.7 SKYLIGHTS

- Retain existing historic skylights whenever possible. Where replacement is necessary, retain the size, location, and shape of the historic skylight.
- Install new skylights on pitched or visible roofs that are flush with the roof plane with frames that are match the color of the roof material. Do not use “bubble” skylights on pitched or visible roofs.
- Avoid locating new skylights on primary roof elevations of pitched or visible roofs.

Figure 31: RECOMMENDED - *Low-profile roof hatch that is not visible from street.*

1.8.9 DORMERS

- Do not install new dormers on primary elevations where there is no physical or photographic evidence of historic dormers on the building.
- If installed on secondary elevations, design new dormers to a scale that preserves the dominant form of the original roof.

1.8.10 ROOF DECKS

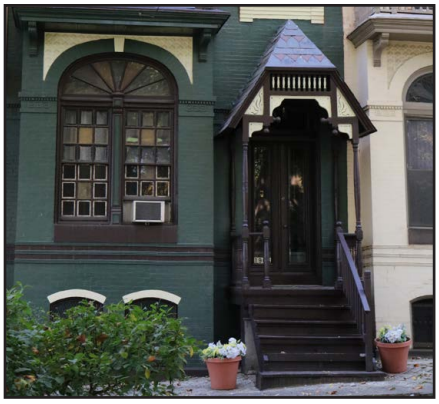
- Where permitted, new roof decks must not be visible from the street-front grade along any primary elevation. Locate roof decks at the rear of a building whenever possible to minimize visibility.
- Consider the shape, material, size, and pitch of the roof when locating rooftop decks.
- Use compatible materials, such as wood and metal, to construct roof decks.
- Minimize the appearance of railings, balusters and decking as much as possible.
- Keep roof decks simple in design. Use balusters

Figure 32: NOT RECOMMENDED - *Highly visible rooftop access that permanently alters the historic roofline.*

and rails that are complementary to the style of the building.

- Provide access to roof decks from the rear of the property whenever possible. Do not construct rooftop pop-ups or doghouses to access roof decks.

Figure 33: NOT RECOMMENDED -
Inappropriate and highly visible roof deck.



Left to right: Entry in Mount Royal Terrace, view of decorative entry and stair, view of rear porch in Bolton

1.9 Porches, Steps, and Railings

1.9.1 PORCHES

Figure 34: *Deferred maintenance at historic wood porch in poor condition.*

Figure 35: RECOMMENDED - *Rehabilitated decorative wood porch.*

- Repair deteriorated or damaged historic porches or porch elements whenever possible. Do not remove a historic porch without replacing it.
- Only replace porches or porch elements that are deteriorated beyond repair or have been replaced with incompatible new materials.
- Photograph distinctive porch elements that are slated for replacement prior to their removal.
- Use historic documentation, physical evidence (such as comparable examples in the neighborhood) or photographs to accurately replicate missing porches or porch elements. If such documentation is not available, use a contemporary design compatible with the size, scale, and material of the historic building.
- When in-kind replacement is not possible, a visually and physically compatible synthetic material may be used that replicates the size, form, shape, texture, and appearance of the historic material. Provide samples and product literature for approval.
- Do not enclose character-defining, front, or highly visible open porches. Enclosing a porch on a rear or secondary elevation may be appropriate in some cases. Where appropriate, use compatible materials and a design that does not impact the historic character of the porch.

1.9.2 EXTERIOR STEPS AND RAILINGS

- Repair deteriorated or damaged historic steps or railings whenever possible.

- Only replace steps or railings that are deteriorated beyond repair.
- Retain the historic orientation of exterior steps.
- Use historic documentation, physical evidence (such as comparable examples in the neighborhood) or photographs to accurately replicate missing steps and railings.
- When in-kind replacement is not possible, a visually and physically compatible synthetic material may be used that replicates the size, form, shape, texture, and appearance of the historic material. Provide samples and product literature for approval.
- Where new railings must be installed on stairs that did not historically have a railing, the new railing design should be simple and in keeping with the historic character of the neighborhood.

1.9.3 CARRIAGE HOUSES, GARAGES, SHEDS, & OUTBUILDINGS

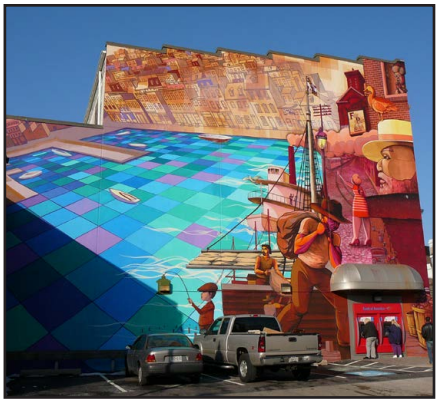
Accessory structures include garages, sheds, and other outbuildings associated with a primary building. Many historic neighborhoods had carriage houses and sheds served by rear alleys. Historic accessory structures are often significant in their own right, due to their siting, scale, design, materials, detailing or function.

Figure 36: RECOMMENDED - *Historic brick carriage house with compatible doors at historic opening.*

- Preserve and maintain existing historic accessory structures and outbuildings where they remain.
- Repair deteriorated accessory buildings and their distinctive features using the materials that match the existing.
- Where replacement materials are proposed, new materials must match existing in durability, texture, and color.
- Replace accessory structures only if they are beyond repair. Replacement accessory structures should be of similar siting, scale, proportion, materials, and color to the original. Reconstruct missing accessory structures only where there is sufficient historical documentation.
- Design new accessory structures to complement the scale, form, orientation, materials, and details of the primary building and other historic structures on the property.
- Locate new garages, sheds, and other accessory structures in rear yards, or in other areas where they may be less visible.

Figure 37: NOT RECOMMENDED - *Inappropriate garage door infill.*

- Do not add new accessory structures that convey a false sense of historical development. New features should not be confused with historic elements.



Left to right: Street view of Federal Hill National Register District, repainted masonry building, a mural on a revealed party wall in Fells

1.10 Paint and Color

Paint protects buildings from the elements and adds color and character. A good coat of paint, well bonded to the substrate, preserves wood, iron, and similar materials. Soft brick was sometimes painted to improve its appearance and durability, and to provide space for advertising. Painted signs were a common sight on the sides of brick buildings in commercial areas during the late nineteenth and early twentieth centuries.

Historically, most wooden surfaces were painted to protect them from weathering. Stain and clear coats were used only sparingly, primarily for interior surfaces. Until the Arts and Crafts movement of the early twentieth century, the grain of soft woods such as pine was not considered to be aesthetically pleasing.

In the past, buildings were painted with a limited palette of colors because natural pigments were expensive. Public taste also dictated that buildings be painted in a manner that complemented the streetscape. Even during the Victorian period, when decoration became bold and complex, building exteriors were generally painted in a few muted tones.

1.10.1 GENERAL

- Door and window hardware were typically made from metals that do not need paintings; as such hardware should not be painted.
- When appropriate, paint gutters, downspouts, metal frames for doors, storm windows and windows, roof-vent assemblies, and fire escapes to match the wall, trim, or roof color of a building. Paint non-historic items with the least conspicuous color to reduce their visibility. For more information on the treatment of specific metals, please see Section 1.4 Metals.
- Do not paint any building element if historical evidence shows that it was never painted.
- Prepare all building substrates properly. Paint will fail if paint is applied to building surfaces that are wet, dirty, have flaking paint, or are improperly prepared.

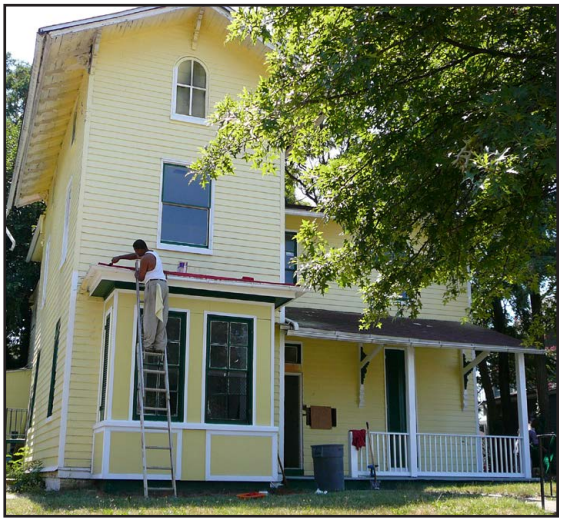


Figure 38: RECOMMENDED - *Painter working on historic house.*

- Apply a compatible paint coating system following manufacturers' application instructions. Generally, a primer coat and two finish coats are recommended.

1.10.2 PAINT REMOVAL AND CLEANING

- Lead paint is a common hazard associated with historic buildings. Applicants must follow Maryland Department of Environment's Lead Poisoning Prevention Program and all federal, state, and local laws pertaining to the safe removal of lead paint. Contractors must be certified by the Maryland Department of the Environment and accredited by the U.S. Environmental Protection Agency.
- CHAP follows HUD's definition of a lead-based paint hazard, being "any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the appropriate Federal agency." (HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing [2012 Edition]). For more information, please see the Lead-Based Paint Hazards Section.
- Remove deteriorated paint down to the next sound layer before applying new paint.
- Do not remove sound, well-adhered paint. Gently clean dirty surfaces and lightly sand, if required, prior to re-painting. Follow methods allowable under HUD Guidelines to prevent exposure to lead-based paint.
- Before exposing painted masonry surfaces, make sure that the underlying masonry is not deteriorated and does not require a painted coating.
- Use the gentlest means possible to strip paint. Hand scraping and hand sanding in conjunction with chemical strippers is generally recommended. A number of commercial paint stripping agents are available of varying strengths and purposes. Select the agent most appropriate to the materials and conditions in the building. Follow manufacturer's instructions.
- Evaluate paint stripping methods and potential adverse effects by completing small test areas prior to stripping paint. Test panels will be required for large scale and special paint removal projects.
- Use of heat producing tools is not recommended and, if deemed necessary, should only be used by experienced professionals.
- Do not use propane or butane torches, sandblasting, waterblasting, or mechanical sanders to remove deteriorated paint from historic buildings. These methods can significantly damage historic building surfaces.
- Reapply an appropriate paint or other coating system to previously painted surfaces after cleaning. Failure to do so will result in deterioration. Confirm compatibility of paint to substrate.

Figure 39: RECOMMENDED - *Painted formstone is permissible, though not required.*

1.10.3 MASONRY PAINTING

- Masonry that has never historically been painted should not be painted.
- Repaint previously painted masonry to match the existing color or

choose a new, historically appropriate color.

- Where appropriate, coat soft and damaged (sandblasted) brick with a masonry paint to prevent deterioration. Use masonry paints specifically designed for such conditions.
- When undertaking a masonry painting project, use a paint that is specifically developed for masonry surfaces. This will help to ensure it will form a strong bond. Follow manufacturer's instructions for preparation and application.

Figure 40: RECOMMENDED - *Decoratively painted rowhouse.*

1.10.4 WOOD PAINTING

- Paint wood surfaces on the exteriors of historic buildings unless there is clear evidence that the wood was not painted.
- Do not strip historically-painted architectural features to bare wood leaving it in an unfinished state.
- Clear finishes and stains are not appropriate for wood surfaces that were historically painted.
- Coat all surfaces of wood repairs, including those that will be concealed, with primer. Painting surfaces to be concealed is called "back-priming" and helps combat deterioration caused by moisture absorption and warping over time.

1.10.5 PAINT COLORS

- Use stylistically and historically appropriate paint colors whenever possible. Use historic photographs, books, and the color palettes of paint manufacturers to help guide paint color selection. When possible, undertake professional paint color analysis to determine historic paint colors.
- Paint analysis will may be required for major projects and for complete paint removal projects in order to preserve the documentary record.
- Choose one or two paint colors for most buildings, particularly residential structures. Three or more colors may be appropriate for buildings with more complicated details, such as Queen Anne style buildings.
- Building style, period of construction, materials, and setting contribute to the appropriate choice of paint colors. Select paint colors that are appropriate for the character of the building time period in which the building was constructed.

1.11 Lighting

Gas lighting was common in Baltimore from the early nineteenth-century until the advent of electrical systems in the early twentieth century. Historically, exterior light fixtures were more common on more elaborate residences and public buildings. Today, homeowners in historic buildings require enhanced lighting. Improving light levels requires selection and placement of appropriate light fixtures fitted with suitable light sources.

- Preserve, protect, and retain historic light fixtures. Original light fixtures can be upgraded, rewired, and refinished for continued use.
- In most cases do not install light fixtures on historic buildings where fixtures were not historically present. Where exceptions are made, select locations that will provide light to the needed area while not negatively impacting the façade of the building.
- Select fixtures that are compatible with the period and design of the building and will not rust and stain the building. Select fixtures that are appropriately scaled to the specific mounting location.
- Do not damage historic building fabric when installing new light fixtures. Install light fixtures in a manner that allows them to be removed with little or no damage to the building.
- Accent lighting should be appropriate to the character of the historic building and should be designed to highlight architectural features in an understated manner. Accent lighting must be the minimum size possible and placed in non-visible locations.
- Where improved light levels are required, lighting shall be designed to evenly illuminate the façade without creating distorting shadows, spilling onto adjacent property, or shining directly outwards. Do not use colored light sources which alter the color of the building. Minimize the size of new light fixtures and place in non-visible locations wherever possible.
- For energy conservation, install the lowest light levels required and use energy efficient light sources.

Left to right: Historic canopy in Mount Vernon, historic marquee and blade sign in Patterson Park, simple canopy in Brewer's Hill.

1.12 Signage and Awnings

The quality of signage and awnings can have a great impact on the character of a historic neighborhood. Poorly designed signs and awnings can detract from the character of a commercial area. Conversely, well-designed signage and awnings can dramatically improve a historic business area with only a small investment. Property owners in historic neighborhoods must follow existing Baltimore City sign and awning codes within the zoning ordinance and any pertinent urban renewal plan, as well as the following guidelines:

- Signs on commercial buildings should respect the existing architectural features and be compatible in scale, color, material, and design with the building. Generally, neon and flashing signs are discouraged.
- Preserve historic signs and awnings that remain on historic buildings, including signs painted on the walls in commercial areas. Historic signs are a legacy of the past and provide interest to the streetscape.
- The design, size, materials, and placement of new signs and awnings should respect the architectural style and original fabric of the historic building. The scale, color, material, ornamentation, and lettering styles of signs and awnings should complement the building.
- Place signs on areas of the building that were historically intended to receive signage, such as large plate glass windows, transoms, awnings, broad plain fascias in a storefront cornice, blank wall areas above a storefront cornice, spandrels, and other flat, unadorned surfaces of the facade. Signs flush with the building's façade are preferred.
- Do not install signs or awnings in a style pre-dating the construction period of the facade. For example, Victorian storefronts should not be adorned with "colonialized" signs.
- Do not cover, or obscure, architectural details when installing new signage and awnings.

Figure 41: RECOMMENDED - *Contemporary awning on non-original storefront. Not attached to historic material.*

- Keep signage simple and easy to read. Orient storefront signage and awnings to the pedestrian. Signs and awnings should not generally project more than three to four feet from the façade.
- Concealed, indirect lighting is preferred for signage in the historic areas. Internally lit signs are generally inappropriate in a historic context. Signs that flash, move, or have inappropriately scaled graphics should not be permitted.

Figure 42: NOT RECOMMENDED - *Incompatible signage on historic building.*

- New signs painted on existing brick surfaces may be permitted. Painted signage is more appropriate on buildings with minimal architectural detailing. Select locations that do not obscure or detract from the historic architecture of the building. The blank sidewalls of buildings are particularly good locations for painted signage.
- Do not install roof-top signs, billboards, and large projecting signs at upper story levels of historic buildings.
- Temporary signs will be approved with time limits.

1.13 Mechanical, Electrical & Plumbing

Modern mechanical, electrical, and plumbing systems make modern life extremely comfortable. Upgrading mechanical, electrical, and plumbing systems makes historic buildings safe, livable, and attractive to tenants or clients. Sensitive systems upgrades retain important elements of earlier systems and preserve historic fabric, while providing modern comforts.

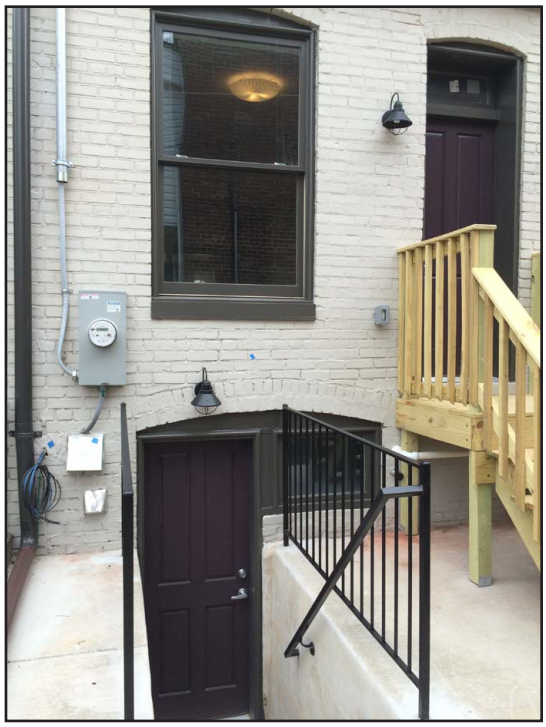


Figure 43: NOT RECOMMENDED - *Electrical meter at main facade of historic property.*

1.14.1 GENERAL

- Install new mechanical, electrical, and plumbing systems that minimally alter exterior elevations and that do not destroy or obscure historic fabric. Provide adequate structural support for new systems.
- Do not cut through existing masonry walls to install new systems or system upgrades.
- If required, install air conditioning units where they will not obscure or damage historic features through excessive moisture.
- Install new systems at window openings in a manner that protects existing sash and frames. Only install systems through existing window openings when all other viable options would result in damage to historic fabric.
- Do not install suspended acoustical ceilings when this obscures the upper portions of windows.

1.14.2 UTILITY METERS AND MECHANICAL EQUIPMENT

- Place utility meters in the least visually obtrusive location available. Where possible install meters on the building interior or on the rear or secondary elevation.
- Modern rooftop elements, such as mechanical units, ducts, solar panels, antennae, satellite dishes, and vents should not be easily seen by the public.
- Locate mechanical equipment in rear yards, on rooftops, or in other locations no easily seen from the street whenever possible.
- Paint roof vents to match the color of the historic roofing material.

1.14 Modern Equipment

1.15.1 SOLAR PANELS

CHAP encourages the use of sustainable technology, including the use of solar panels, where the installation is sensitive to the historic nature of the building and its setting. Install new solar panels where they are least obtrusive, do not damage historic fabric, and are not visible from the street.

Figure 44: NOT RECOMMENDED - *Solar panels on front slope of gable roof.*

- Do not install solar panels where they can be easily seen from the street. When panels are placed on buildings, locate panels on flat or rear sloping roofs. Select panels that are low in profile and small in scale.
- When panels are located in a yard or landscape, panels should be screened to minimize visibility. Do not alter character-defining features of the landscape. For more information, see Chapter 4: Design Guidelines for Historic Landscapes.
- Do not damage or remove historic fabric when installing solar panels. Install panels on non-historic buildings and additions whenever possible.

1.15.2 SECURITY CAMERAS

- Install security cameras in the least obtrusive location possible.
- Select camera models that are as small in scale as possible.
- Do not damage or remove historic materials or obscure historic features when installing security cameras. Attachments should be made through mortar joints rather than masonry.

1.15.3 TELECOMMUNICATIONS FACILITIES AND EQUIPMENT

- Locate telecommunications facilities and equipment on non-historic buildings whenever possible.
- Screened and stealth facilities are strongly encouraged in historic districts and on historic buildings when they will significantly minimize the impact of an installation.
- Do not damage or remove historic materials or obscure historic features when installing telecommunications facilities and equipment.

Figure 45: RECOMMENDED - *Cell tower antennas located at penthouse of historic building, generally not visible by pedestrians.*

1.16 Accessibility

Making buildings and sites accessible to individuals with physical disabilities is important and required by law for publicly accessible buildings; however, this can be a challenge in some historic contexts. Most building codes provide allowance for addressing accessibility in creative ways.

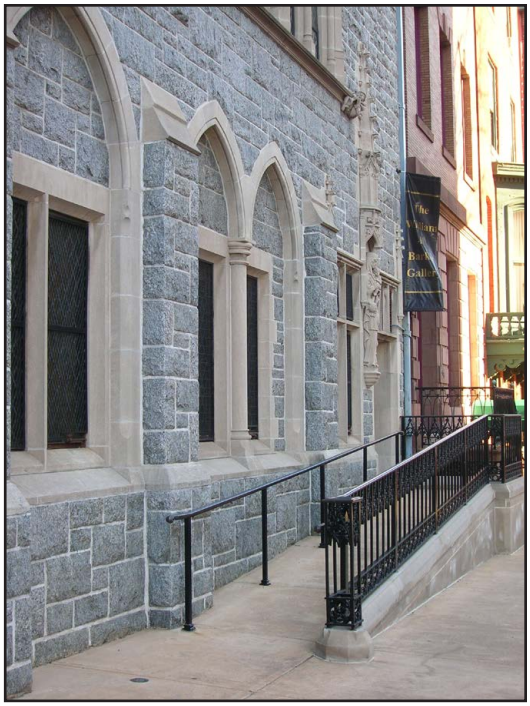


Figure 46: RECOMMENDED - *New ramp sensitively designed to be compatible with the historic building.*

- Provide barrier-free access at historic buildings and sites to the highest degree possible while preserving historic features and fabric.
- Design barrier-free access as required by the Americans with Disabilities Act and state and local codes.
- Design barrier-free access to be compatible with the historic character of the building in materials, proportions, and detailing.
- Do not damage or remove historic fabric when designing and installing new barrier-free solutions.
- Appropriate landscaping may be used to screen ramps, elevators, or other elements related to barrier-free access.

1.17 Lead-Based Paint Hazards

The Commission may consider the replacement of architectural features because they are a lead-based paint hazard on an accessible, friction, or impact surface. CHAP may require the retention of historic features and the use of other lead-based paint hazard reduction techniques. For more information on current lead-based paint laws and requirements, please contact the Maryland Department of the Environment. CHAP follows HUD's definition of a lead-based paint hazard, being "any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the appropriate Federal agency." (HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing [2012 Edition])

Figure 47: *Historic door with layers of paint.*

- The term "Accessible Surface" means an interior or exterior surface painted with lead-based paint that is accessible for a young child to mouth or chew.
- The term "Friction surface" means an interior or exterior surface that is subject to abrasion or friction, including certain window, floor, and stair surfaces.
- The term "Impact surface" means an interior or exterior surface that is subject to damage by repeated impacts, for example, certain parts of door frames.
- Lead paint is a common hazard associated with historic buildings. Applicants must follow Maryland Department of Environment's Lead Poisoning Prevention Program and all federal, state and local laws pertaining to the safe removal of lead paint. Contractors must be certified by the Maryland Department of the Environment and accredited by the U.S. Environmental Protection Agency.
- Painted surfaces should be carefully maintained to reduce the risk of lead exposure from flaking or chipping paint or lead paint dust.
- Historic buildings typically display a high quality of design and materials which should be retained. Special features that are custom designed or crafted, or that represent a high degree of styling or detailing, or that are composed of more unusual building materials warrant particular care and every effort should be made to preserve them. Elements that were mass-produced, do not have distinguishing characteristics or that are easily replicable may be considered for replacement if they are a lead-based paint hazard. Replacement features must follow the existing CHAP Guidelines for replacement.
- Every effort should be made to repair and eliminate lead-based paint hazards on special features. If a special feature is deteriorated beyond repair or a lead-based paint hazard cannot be eliminated without removal, a special feature must be replicated per CHAP Guidelines for replacement. CHAP may require the use of alternative methods rather than removal. For more information on addressing lead-based paint hazards, please contact the

Maryland Department of the Environment and the U.S. Environmental Protection Agency.

- When an applicant requests the replacement of a historic feature because it presents a lead-based paint hazard, the applicant must present the following:
    1. A test result that demonstrates that a feature has tested positive for lead.
    2. Documentation of the existing original feature, including profiles, dimensions, configuration, etc. This documentation should include drawings, photographs and any other relevant materials.
    3. A detailed proposal for a replacement feature, that includes a cut sheet or shop drawing of the proposed replacement feature, and a detailed description of the profile, dimensions, configuration, material, color, finish, etc. A sample may be requested by CHAP.

All proposed replacement materials must meet the CHAP Guidelines for replacement features.

1.18 Alterations and Additions

As owners, occupants, and building uses change, buildings must accommodate new needs. Adaptive reuse is important for historic neighborhoods undergoing growth or revitalization. Adaptive reuse may include major alterations or new additions to meet changing needs. Inappropriate alterations and additions can diminish the integrity of a historic building; however, carefully designed alterations and additions that are sensitive to historic character and building fabric are encouraged. Please consult the Design Guidelines for New Construction, located in a subsequent section of this document, in addition to the following:

- Retain historic character defining features when planning alterations and additions to a historic building.
- Design alterations and additions to be compatible and sympathetic to the character of the historic building.
- Design additions to be compatible with the existing historic structure in massing, height, form, and scale. Place additions on a secondary elevation.
- An addition may be contemporary in design, or it may replicate the historic character of the main building. Where an addition replicates the historic character of the main building, create subtle differences to clearly distinguish it as a later structure.
- Avoid incompatible architectural features in new additions, such as bay windows, when they are inconsistent with the character of the historic building.
- Document existing historic conditions in drawings and photographs before beginning any alterations and additions.
- Design and place new garage entrances and doors to be compatible with surrounding buildings. Do not place garage entrances on primary facades where there is no historic precedent. Place new garage openings on rear elevations whenever possible.

Clockwise from upper left: MICA's Leake Hall, rendering of proposed community center in Sharp Leadenhall, proposed new construction and rehabilitation at the Hendler Building in Jonestown, Union Wharf in Fells Point.

Chapter 2: Design Guidelines for Additions, New Construction, and Non-Contributing Buildings

The character of historic districts relies heavily on the visual continuity established by the rhythm and repetition of similarly designed buildings. New construction can play an important role in contributing to that rhythm. The design of new buildings in historic districts should be consistent with the site design, scale, form, features, and detailing established by surrounding structures. In addition, new buildings should contribute to the pedestrian-oriented character of the neighborhood. For new construction projects, property owners and designers should comply with the guidelines outlined below. Applicants within the Mount Vernon local historic district should apply the Baltimore City's Mount Vernon Historic District Design Guidelines for New Construction.

2.1 Guiding Principles for New Design

Baltimore has a long tradition of distinctive high-quality architectural design. New projects should respect the City's architectural traditions while relating to the present. Nothing, however, can replace design excellence, which cannot be achieved through regulation. A design team experienced in historic preservation will bring careful thought, sensibility, flexibility, and high quality to new construction projects within a historic district. Design excellence cannot be achieved by simple application of a formula but by creative response to contemporary requirements and the historic context.

- Avoid demolishing historic buildings, structures, and landscapes when designing new construction projects.
- Identify the character-defining features of the surrounding historic buildings and streetscape. Design new buildings to visually relate to the historic environment. Respect the established design precedent in the immediate area.
- Contemporary architectural design that reflects its current time, place, use, and culture is accepted, provided that the design is compatible with the character of the historic district.
- Radically contrasting building designs are discouraged within local historic districts.
- New buildings that are similar to existing buildings in materials, form, massing, and architectural features are accepted as long as the new buildings can be distinguished from historic buildings.

2.2 Site Design

By recognizing and reinforcing neighborhood character, new construction projects can contribute positively to historic districts. Important site design elements for new construction include setbacks, building orientation, and the patterns of yards, site features, and landscaping. Many of these site design elements are governed by the Zoning Code.

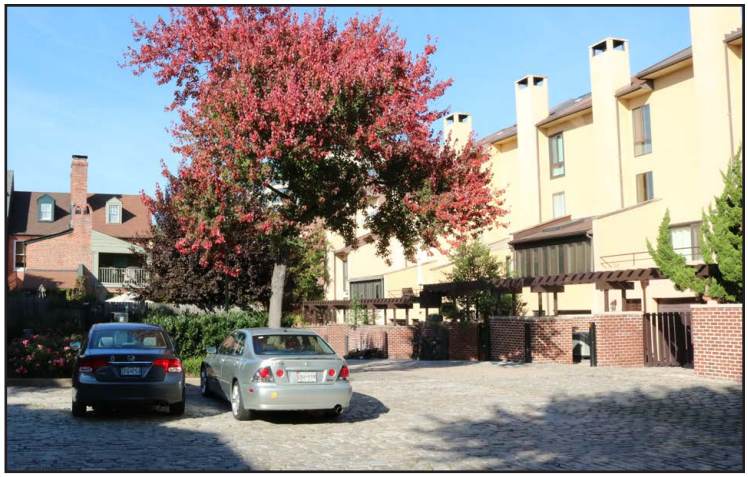


Figure 48: RECOMMENDED - *New construction in Otterbein maintains the rhythm of the historic buildings in a modern aesthetic.*

- Retain established property line patterns, street and alley widths, setbacks, primary and secondary building orientation, and landscape elements.
- Incorporate character-defining site design features of the historic district into the designs of new construction projects.
- In areas with varied setbacks, the setback for new construction should be within ten percent (10%) of those of neighboring buildings. Variations to these setback guidelines may be warranted in some cases, but decisions should be carefully considered with respect to their impact on the overall streetscape.
- The spaces between buildings help define the historic character of the neighborhood. Design new construction to follow the existing pattern of building widths and spacing between buildings.
- Primary buildings should have a similar orientation and relationship to the street as the existing buildings. Primary entrances and facades should be located, oriented, and sequenced to be consistent with the pattern of entrances and facades in the neighborhood.
- Locate and orient secondary structures, such as garages, sheds, or rear buildings, in a similar manner as existing secondary structures.
- New construction projects should reinforce existing patterns of open space and enclosure created by existing vehicular and pedestrian circulation routes, fences, walls, yards, courtyards, gardens, and landscaping.
- New construction at corners or abutting public spaces require special consideration in the design of entrances and multiple, publicly visible facades.

2.3 Scale and Form

The scale and form of new construction determines the size, shape, and volume of the overall building envelope. The scale of new buildings establishes the relative size of the new building in relationship to its neighbors. Within the building design itself, the relative size of major architectural features, such as windows, doors, and roof elements, determines whether the building has a monumental or human scale. The form of a new building is shaped by its height, width, massing, proportions, and roof lines.

- The scale and form of new buildings must be compatible with the height and depth of surrounding buildings. Where there is variation of building height within the immediate neighborhood, the new building should generally relate to the predominant pattern.
- New buildings must complement the massing of surrounding buildings, including the proportion of solid surfaces (walls) to voids (window and door openings.) Respect the characteristic rhythm (fenestration, bays, rooflines, etc.) of existing buildings.
- Design the new building to be proportional to surrounding buildings. Consider important building proportions such as floor-to-floor heights, the size and placement of windows and doors, the scale of articulated elements such as porches, overhanging cornices, and bay windows.
- Floor-to-floor heights in new construction should be within ten percent (10%) of the floor-to-floor heights of adjacent historic buildings.
- Design rooflines to be compatible with those found on surrounding buildings.

Figure 49: RECOMMENDED - *A large addition on a stand alone single family home is set back from the historic building and is generally lower in scale than the historic building, and retains elements of the architectural design.*

2.4 Building Features

Building features such as entrances, bay windows, garages, and roofs add visual interest and break up the building mass. The location, size, and style of these building features help define the character of the surrounding neighborhood. New buildings that respect the prevailing architectural features of the surrounding buildings will enhance the character of the neighborhood.

2.4.1 BUILDING ENTRANCES

- Design building entrances to enhance the connection between the street and the building interior.
- Respect the existing pattern of building entrances when locating new entrances.
- Design new storefront entrances that are compatible with surrounding commercial buildings.
- Design new porches and stoops that are compatible with the form, scale, and detailing of these features on surrounding buildings. In districts where traditional historic porch columns are prevalent, new columns should be designed to be compatible with historic types.

Figure 50: RECOMMENDED - *Addition at a existing historic warehouse building maintains the large warehouse style windows, flat roof, and grade level building entrances.*

2.4.2 BAY WINDOWS

- Design new bay windows to be compatible with the length, height, and style of bay windows on surrounding buildings.
- Do not design new bay windows in neighborhoods where there is no historic precedent.

2.4.3 GARAGES

- Design and place garage entrances and doors to be compatible with surrounding buildings.
- Do not place garage entrances on front facades where there is no historic precedent.

2.4.5 ROOFS

- Design new roofs to complement the orientation, pitch, complexity, and scale of roofs on surrounding buildings.
- Locate and screen rooftop features to minimize their visibility from the street.
- Design cornices to be compatible with the height, scale, and articulation of existing cornice lines on surrounding buildings.

2.5 Materials and Detailing

Architectural materials and detailing provide visual interest, texture, and quality to the building façade. Using compatible materials and building details in new construction will promote continuity within the existing historic neighborhood.

2.5.1 DOORS AND WINDOWS

- Design doors and windows to be compatible with the placement, scale, type, and operation of doors and window and their openings in surrounding buildings.
- Design doors and windows to be compatible with the architectural character of the new facade and the surrounding buildings.

2.5.2 MATERIALS

- Choose building materials that are compatible with the color, size, texture, scale, and quality of building materials used in surrounding buildings. Where a particular material is dominant within an area, utilize that material in the new design.
- Cover and finish exterior walls with quality materials that are compatible with surrounding buildings. Traditional materials existing within the historic district, such as wood, brick, and stone, are preferred.

Figure 51: RECOMMENDED - *New construction adjacent to the Ednor Gardens National Register Historic District uses compatible materials including a stone base that relates to the stone buildings across 36th Street.*

Clockwise from upper left: Rehabilitated entry in Fells Point, rehabilitated stair in Union Square, typical interior in Mount Vernon, alter at St. Johns in the Village.

Chapter 3:
Design Guidelines for Historic Interiors

Architectural interiors offer a rich history of a building over time. Pristine, unaltered interiors may reveal an aesthetic of a certain era or owner. Interiors that have been altered by each succeeding generation provide a history of change and technological improvements. Unfortunately, interiors that have been heavily renovated are often stripped of all their previous history. The Design Guidelines for Historic Interiors help property owners formulate preservation plans for the rehabilitation, preservation, and continued use of historic public interiors the interiors of historic buildings and assist in determining the appropriateness of such plans. These guidelines apply to permanent and temporary construction projects for landmark interiors, as well as rehabilitation or new construction projects that may impact them in landmarked public interiors and historic rehabilitation tax credit projects. CHAP may apply these guidelines strictly or leniently based on site conditions.

3.1 General Considerations

The following general considerations will assist property owners and designers when planning alterations to a landmark interior:

- Identify and assess character-defining interior architectural features. Wherever possible, retain character-defining features of interior spaces including floor plan, ceiling height, and distinctive features, materials, and finishes.
- Examples of distinctive materials include wood, iron, aluminum, cast iron, marble, terra cotta, tile, stucco, plaster, and brick.
- Examples of important historic finishes include decorative wood flooring, carpeting, wallpaper, paint, plaster, and other applied ornament.
- Examples of significant architectural features include cornices, brackets, railings, columns, interior shutters, baseboards, fireplaces, window and door moldings, stairs and walls, fixed furniture, light fixtures, and hardware.
- Avoid the removal or alteration of any historic interior feature whenever possible.
- Repair deteriorated interior architectural features, wherever possible. Do not alter significant interior architectural features during the repair process.
- Replace interior architectural materials and features that are deteriorated beyond repair with new materials and features that match the original in design, color, texture, and other visual qualities. The use of materials that were unavailable when the building was constructed is discouraged.
- Replace missing architectural features based on accurate duplication of features, substantiated by historical, physical, or pictorial evidence rather than on conjecture.
- Historic interiors should be recognized as products of their own time. Alterations that have no historical basis and seek to create an earlier, historic appearance are discouraged.
- Previous changes to an interior that have acquired historic significance in their own right should be recognized and respected. Intrusive changes that have resulted in harm to historic

building fabric or in the loss of historical significance and integrity may be reversed as part of a rehabilitation project.

- The Commission takes lead-based paint hazards very seriously. For projects that propose the alteration or removal of features contaminated with lead-based paint, the Commission will take into account the significance of the finish or feature in question, what impact that an abatement proposal will have on the historic character of the building, and the requirements of applicable federal, state, and local laws in the project review. CHAP follows HUD's definition of a lead-based paint hazard; for this and more information on lead-based paint hazards, please refer to Section 1.17 Lead-Based Paint Hazards.
- Where little or no interior historic fabric remains, the use of either compatible materials or contemporary design may be appropriate.

Right to left: Entry parlor in small Baltimore rowhouse, decorative fireplace and surround in Baltimore rowhouse, historic warehouse interior.

3.2 Distinctive Interior Features

Important interior public spaces, such as lobbies, reception and entrance halls, parlors, theaters, auditoriums, and significant industrial or commercial spaces, are distinguished by their character-defining features. The following addresses the preservation of key interior features that are often damaged during rehabilitation work.

3.2.1 OVERALL PLAN, PROPORTIONS, AND CONFIGURATION

- Retain and preserve interior spaces, including size, configuration, proportion, and relationship of rooms and corridors, that are important in defining the historic interior.
- Do not subdivide character-defining interior spaces either vertically, through the insertion of new partitions, or horizontally, through the insertion of new floors or mezzanines. The addition of interior partitions may be considered if they do not damage or destroy structural systems or obscure or damage character-defining spaces, features, or finishes.
- Non-historic partitions installed during earlier renovations may be removed in order to restore the room to its original proportions and size.
- Do not cut through floors and ceilings where this work would damage character-defining interior spaces.
- Install new stairways, floor elevations, fire escapes, and other code required elements in a manner which does not diminish the integrity of the interior.

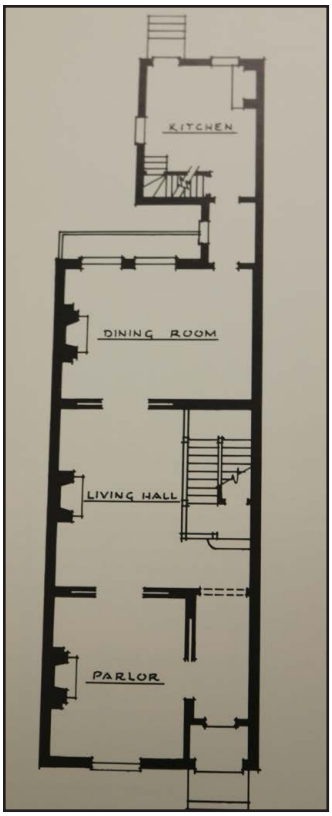


Figure 53: *A typical Baltimore rowhouse floor plan. (Credit: Natalie W. Shivers,* Those Old Placid Rows, *Baltimore: Maclay & Associates, 1981)*

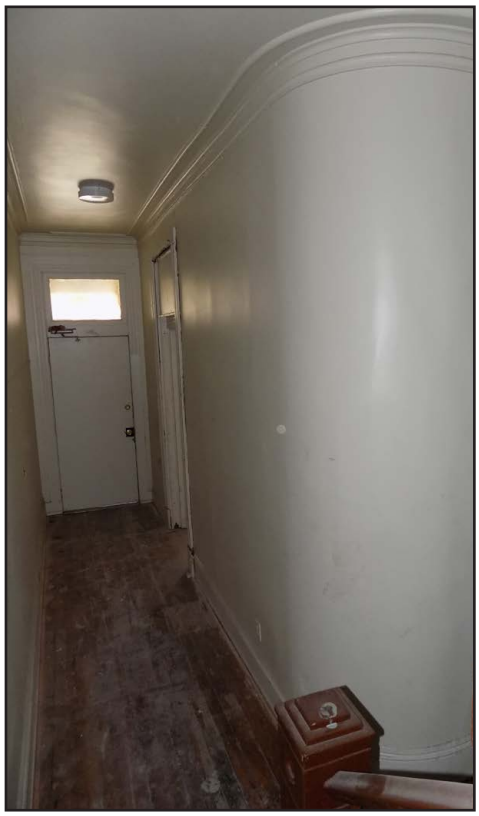


Figure 52: *The curved wall is a typical historic feature in many Baltimore rowhomes.*

3.2.2 VERTICAL CIRCULATION

- Retain and preserve character-defining stairs and elevators in their historic configuration and location.
- The installation of alternative fire suppression systems, such as sprinklers or fire-rated glass enclosures, may permit the retention of historic stairs in commercial buildings.
- Retain the original material and architectural features of stairs, such as steps, hand rails, balusters, columns, brackets, and decorative materials, wherever possible. If these materials must be replaced, the new materials should match the old as closely as possible.
- Retain and preserve existing historic elevator cabs and other character-defining elements, such as call buttons or floor indicators, whenever possible. Original cabs can often be upgraded with new elevator systems in order to meet current building codes.
- If required by building code, place new stairs and elevators in secondary spaces or service areas.

Figure 54: *Examples of typical historic stair configurations in Baltimore single-family homes.*

3.2.3 CEILINGS

Figure 55: *Example of damaged historic tin ceiling and light fixture.*

- Retain and preserve the original ceiling height, materials, and ornament, whenever possible. Deteriorated ceiling materials should be replaced with new material that matches the old in composition, size, shape, color, texture.
- Do not install suspended ceilings below ornamental ceilings or in spaces where high ceilings define interior character.
- If suspended ceilings are installed in secondary spaces, design new ceiling soffits to be well set back from the windows so the suspended ceiling is not visible from the exterior.

3.2.4 WINDOWS AND DOORS

- Retain and repair existing window and door elements and openings, including window sash, transoms, glass, lintels, sills, frames, molding, doors, and all hardware, whenever possible.

Do not introduce new window or door openings into the principal room elevations or alter window or door openings to fit new stock windows and doors.

- For fire rating purposes, building officials may allow the retention of original doors and glazing if equivalent levels of protections are offered through alternate methods such as sprinklers.
- If new sash and doors must be used, these should duplicate the size, material, design, and hardware of the older existing ones. Do not use Plexiglas where there is no historic precedent.

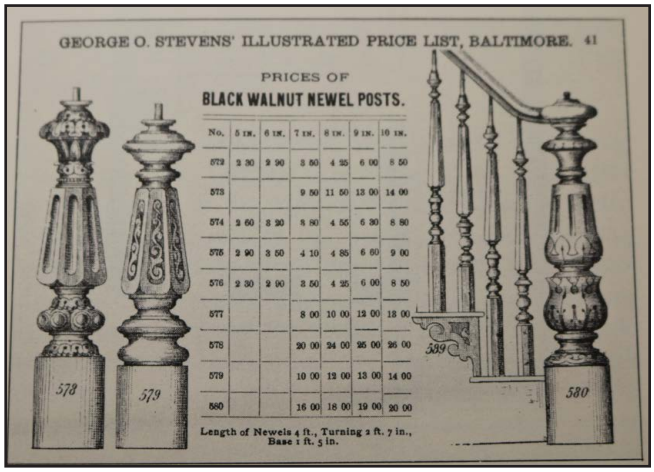
Figure 56: *This arched window maintains the rectangular trim found typical of many Baltimore rowhouses.*

Figure 57: *A historic vestibule including door, marble step, and transom.*

- Storm windows and doors (while normally installed to the exterior) may be installed on the interior if they are visually unobtrusive, do not damage existing frames, and can be removed in the future. Interior storm windows should match the interior trim color. Mill finished aluminum and vinyl frames can be painted to match the window frame.

3.2.5 RAILINGS

- Do not remove historic railings at balconies or other locations. Railings are important elements of the design and character within a structure.
- Do not replace railings with new railings of an inappropriate design or material.



GEORGE O. STEVENS' ILLUSTRATED PRICE LIST, BALTIMORE. 41

PRICES OF

BLACK WALNUT NEWEL POSTS.

No.	5 in.	6 in.	7 in.	8 in.	9 in.	10 in.
572	2 30	2 90	3 50	4 25	6 00	8 50
573			9 50	11 50	13 00	14 00
574	2 60	3 20	3 80	4 55	6 30	8 80
575	2 90	3 50	4 10	4 85	6 60	9 00
576	2 30	2 90	3 50	4 25	6 00	8 50
577			8 00	10 00	12 00	18 00
578			20 00	24 00	25 00	26 00
579			10 00	12 00	13 00	14 00
580			16 00	18 00	19 00	20 00

Length of Newels 4 ft., Turning 2 ft. 7 in., Base 1 ft. 5 in.

Figure 58: *Listing from historic catalog showing different newel posts. (Credit: Natalie W. Shivers,* Those Old Placid Rows, *Baltimore: Maclay & Associates, 1981)*

3.2.6 STRUCTURAL SYSTEMS

- Weakened, damaged, or inadequate structural members and systems should be promptly stabilized, repaired, or reinforced. If access to structural members requires removal or destruction of distinctive finish materials, they should be returned to their previous appearance after work is completed.
- When addressing structural problems to an historic interior, a structural engineer's report may be requested.

3.2.7 MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS

- Retain and preserve visible character-defining mechanical, electrical, and plumbing system elements, such as heat registers, vents, fans, radiators, switch plates, light fixtures, and plumbing fixtures, where possible.

- New interior light fixtures should be an appropriate size and placed in an appropriate location. Avoid selecting oversized fixtures.
- Install new mechanical, electrical, and plumbing systems in a way that does not alter, damage, or destroy character-defining spaces, features, and finishes. Locate new bathrooms or equipment rooms in secondary spaces or service areas. Install ducts, pipes, wiring, and security and telecommunications cables as inconspicuously as possible utilizing secondary spaces, attics, basements, and existing closets.
- Avoid furring-out exterior walls to add insulation and suspending new ceilings to hide ductwork.
- Provide adequate ventilation in attics, crawlspaces, and basements to avoid deterioration of systems from excessive moisture.

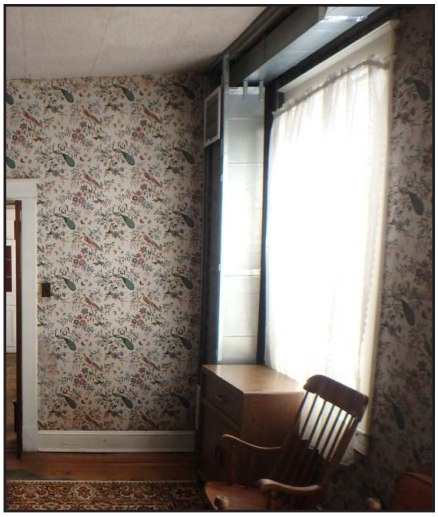
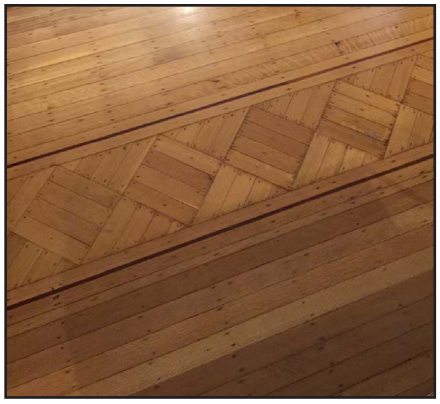
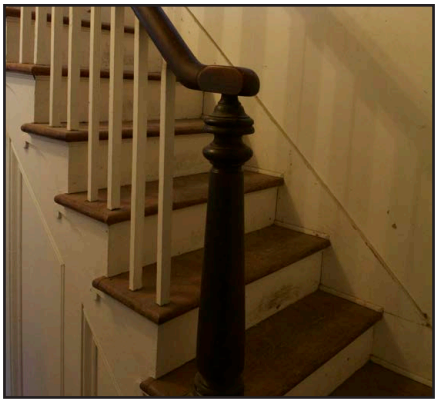
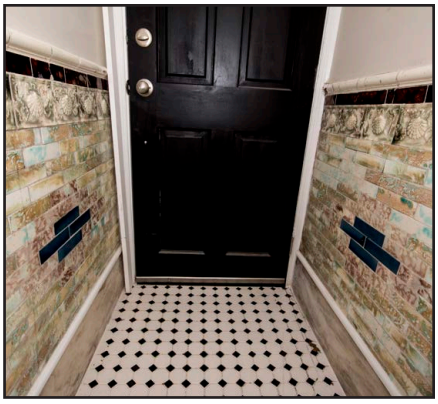


Figure 59: NOT RECOMMENDED - *Inappropriate duct work in historic house.*

Right to left: Decorative wood floor, decorative wood newel post and balustrade, tile vestibule wall finish typical in many Baltimore rowhouses.

3.3 Distinctive Materials and Finishes

3.3.1 GENERAL

- Protect and maintain distinctive interior materials and finishes, including masonry, wood, architectural metals, and plaster, with appropriate maintenance treatments such as cleaning, rust removal, limited paint removal, and reapplication of protective coating systems.
- Preserve and restore historic finishes such as painting, staining, gilding, graining, and other decorative finishes whenever possible.
- Retain the original color and texture of interior materials and finishes (including early signage or artwork) whenever possible.
- Do not remove undamaged historic interior materials.

Figure 60: NOT RECOMMENDED - *Historic fireplace with various deteriorating materials.*

3.3.2 CLEANING

- Clean masonry, wood, architectural metals, and plaster only when necessary to halt deterioration or to remove graffiti and stains. Indiscriminate removal of paint may cause damage.
- Clean architectural metals such as bronze, cast iron, steel, pressed sheet-metal, aluminum, and zinc with an appropriate method. Do not alter the color, texture and tone of the metal.
- Use the gentlest methods possible when cleaning the surface of interior materials and finishes. Cleaning methods that will damage the historic building materials are not allowed.
- Evaluate cleaning methods in a small test area first in order to observe any potential adverse effects.

3.3.3 MASONRY, WOOD, AND ARCHITECTURAL METALS

Please see relevant sections on masonry, wood, and architectural metals in Chapter 1 for treatment of these materials.

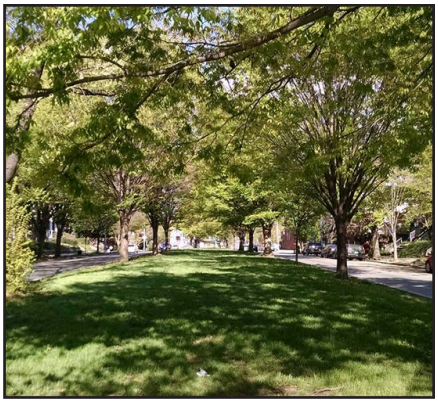
3.3.4 PLASTER

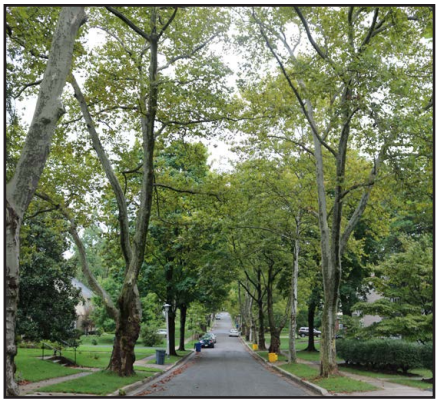
- Stabilize loose or bulging plaster, particularly at ceilings and surfaces with ornamental plasterwork.
- Repair plaster with a plaster mixture that matches the original mix in composition, appearance, and texture as closely as possible.
- Do not remove plaster to expose masonry walls unless there is a documented historical precedent.

Figure 61: *Deteriorating decorative plaster trim.*

3.4 Paint and Color

- A professional paint analysis of historic interior finishes is encouraged prior to undertaking rehabilitation work, whenever possible.
- Remove paint and other clear finishes using the gentlest method possible and in compliance with all federal, state, and local regulations. Applicants must follow Maryland Department of Environment's Lead Poisoning Prevention Program and all laws pertaining to the safe removal of lead paint. Contractors must be certified by the Maryland Department of the Environment and accredited by the U.S. Environmental Protection Agency. For more information, please see Section 1.17 Lead-Based Paint Hazards.
- Repaint or refinish interior surfaces with a compatible paint or other coating system.
- Repaint with colors and sheen levels that are appropriate to the historic interior. Paint colors must be submitted for approval.
- Interior lighting strongly affects the perception of colors. Finalize interior paint colors after establishing the type, location, and intensity of interior lighting. If possible, final paint color selection should be done after lighting has been installed.
- Do not remove paint or other finishes from architectural features that were never intended to be uncoated.
- Repainting with the same color as existing color is considered maintenance and does not require an Authorization to Proceed.





Clockwise from upper left: Stair at Patterson Park, Olmsted Parkway along 33rd Street, street trees in Cedarcroft National Register District, fountain at Union Square Park.

Chapter 4:
Design Guidelines for Historic Landscapes

In addition to historic buildings, proposed changes to all visible elements of historic landscapes, including streetscapes that are located within local districts and all public parks, as well as those spaces designated as a Baltimore City Landmark are reviewed. These landscapes are as integral to Baltimore's historic character as its buildings. Historic landscapes vary from urban streetscapes near the City center to the parks, plazas, and gardens nestled within the City grid; from natural forested areas to gravestone-studded cemeteries; from fenced yards of rowhouse districts to pastoral suburban neighborhoods at the City's outer edges. These settings weave together Baltimore's historic fabric.

4.1 Landscape Types

The following section describes special considerations for specific landscape types found in Baltimore City.

4.1.1 STREETSCAPES

The streetscape is the predominant organizing element of most neighborhoods and is defined by the space between the buildings lining the public ways. Buildings are often the dominant streetscape features, defining spaces, creating rhythms, and adding textures through their form, massing, materials, and architectural features. Private yards, when they are present, also contribute to the spatial character of the streetscape. The streetscape is itself comprised of various elements that combine to give it character: streets and alleys, sidewalks, monuments and public art, and small-scale features such as street furniture, lighting, fences, and walls.

- Preserve all streetscape elements located within the cross-section between the buildings including the road width, grade, crown, swale, curb, tree lawn, sidewalk, and setbacks.
- Preserve the form, scale, and massing of building facades that line the public way.
- Maintain designed views of monuments and public art.
- Preserve historic site furnishings and accessories, including street signs.
- Preserve the shared open space visible from the public way created by contiguous private yards and their respective building setbacks.
- Preserve the materials and architectural features of historic building facades associated with the streetscape.
- Retain the organization, pattern, and rhythm of building entrances along the sidewalk.
- Support ground level building uses and configurations that contribute to the vitality of the street-level community life.
- Retain historic vehicular and pedestrian circulation patterns wherever possible.
- Protect and encourage street tree plantings where their health can be sustained and where there is historic precedent.

4.1.2 PUBLIC PARKS

Designated public parks within Baltimore City include large, designed areas, such as Druid Hill; institutional open spaces, such as St. Mary's Park in Seton Hill; military sites or civic monuments, such as Fort McHenry and Mount Vernon Place; and open green spaces of varying scales incorporated within the City grid, from the expansive Union Square and Riverside Park to the pocket parks within Old West Baltimore.

- Preserve landscape features that are critical to park identity and form. Consider how site context has influenced the existence and design of the park.
- Preserve and protect significant views in, out, and through public parks. Park views enhance the value of surrounding properties. Open views within parks offer relief from the activity of the urban environment. Consider the impact on views when siting new (or removing existing) plantings or structures.
- Maintain existing walkways within parks in good repair. Consider the impact on historic circulation patterns when creating new – or removing existing - trails, paths, and walkways.
- Preserve and maintain significant historic accessory structures, such as pavilions and fountains that are often focal points within the landscape.
- Site and design necessary new accessory structures, such as pavilions and restroom facilities, to be as unobtrusive as possible.
- Consider impacts to existing historic spatial organization and landscape setting when planning new additions to public parks.
- Monitor the condition of trees within parks to track potential encroachment of disease and pests.
- Remove diseased or dead trees and replace with tree cultivars that will thrive in the site's particular conditions.

4.1.3 CEMETERIES

In Baltimore, early graveyards were clusters of small plots and headstones located close to a house of worship. By the mid-nineteenth-century, cemeteries were designed as large expanses with notable sculptures and picturesque plantings that also served as popular destinations for passive recreation. Today, Baltimore historic cemeteries, such as Greenmount Cemetery, provide valuable green space in dense urban communities. Grave markers are also valuable records of historical demographics and artistic expression. The abundance of small-scale masonry elements makes material conservation a primary concern of cemetery preservation.

- Preserve, protect, and maintain existing historic cemetery landscape features, including fences, gates, walkways, ornamental trees and shrubs, monuments, memorials, and grave markers.
- Stabilize leaning or loose grave markers and headstones. Keep perimeter walls or fences secure and in good condition. Control weeds and overgrown shrubs.
- Avoid the use of fertilizers, biocides, and landscape equipment that can damage monuments, markers, and headstones.
- Before treating masonry, identify materials and document their condition.
- Repair cracked or broken masonry and treat corroding metal anchors and fences. Avoid the

use of hard mortars on weathered masonry.

- When vandalism occurs, store broken materials on-site in a secure location until restoration is possible.
- Evaluate the need for cleaning grave markers. Light soiling and biological growth may be acceptable. Some surfaces may be too delicate to clean. Removal of overgrown vegetation may effectively stop some forms of soiling.
- When cleaning is necessary, use the gentlest means possible. Low-pressure water washing can be effective.
- Consult a masonry conservator before using any chemical cleaners. Do not use any household cleaners, such as bleach, on grave markers.

4.1.4 ECOLOGICALLY SENSITIVE AREAS

Several Baltimore historic districts include areas that are considered ecologically sensitive, such as Gwynn's Falls in Dickeyville and the forested edge of Leakin Park in Franklintown. Stream corridors and forested areas are significant resources, particularly in a dense urban context. These areas provide habitat, slow and filter stormwater, purify air, mitigate temperatures, and contribute aesthetically to the environment.

- Preserve, protect, and maintain landforms, trees, and other plantings using ecologically approved methods.
- Regulate adjacent development to minimize impacts on ecologically sensitive areas.
- Maintain no-mow zones along stream corridors.
- Design new development within or near sensitive areas to avoid negative environmental impacts. When avoidance is impossible, enhance ecologically sensitive areas and mitigate negative environmental impacts.
- Encourage tree plantings, especially within City parks and stream buffer zones.
- Maintain recreational trails in ecologically sensitive areas to promote public interest and to discourage pedestrian traffic off the trail.

4.2 Landscape Features

Landscape features, ranging from large-scale patterns to small-scale elements, contribute greatly to historic places. Maintaining historic landscape features ensures the preservation of public spaces that are both functional and aesthetically pleasing. To determine the integrity of existing features within a historic district, consult documentary evidence such as historic photographs and maps. The preservation and repair of historic landscape features are always preferable to their replacement. When replacement is unavoidable, the design of new features should be compatible with the historic context but discernible as new.

Figure 62: *View from vegetated area at Patterson Park.*

4.2.1 SITE CONTEXT

It is important to understand the site, including natural and man-made features, in relation to the immediate area and region. Topography and proximity to natural features often determined settlement patterns. Businesses and warehouses clustered at the harbor edge while mill villages stretched along streams. Important landforms to consider are natural features such as hills, valleys, streams, rivers, and forests, as well as man-made forms such as embankments, cuts, and configurations of buildings and streets.

- Identify, retain, and preserve historic spatial organization and land patterns as they have evolved over time.
- Preserve and protect character-defining natural and manmade landforms.
- Maintain the existing topography around historic buildings if possible. Avoid altering the topography adjacent to historic buildings when constructing new buildings.
- Retain open spaces, such as large, sloped lawns adjacent to historic buildings. Open spaces are integral to site planning and are often recreational resources as well.
- Site and design new work to minimize the impact upon the historic site. If possible, new work should enhance the land patterns, spatial organization, and character-defining landforms of the existing landscape.

4.2.2 VIEWS

Views to, from, or within historic districts contribute greatly to their character and are considered a significant resource. Important views include streetscapes framed by rows of trees, vistas across open lawns of a park, or the prospect of the Inner Harbor visible from a high point of elevation. Some views are the result of a natural topography, others are intentionally designed.

- Maintain historic views to and from buildings, particularly views of the facades of these buildings.
- New construction should not obstruct views determined to be significant resources within historic districts.
- Remove intrusions into historic views or screen them with tree and shrub plantings.
- Locate mechanical equipment, storage, and trash receptacles away from view by placing them behind existing buildings or by screening them with historically compatible plantings, walls or fences.
- New decks and patios should be located in the rear yard and designed to be compatible with the building and landscaping if it can be seen from the public street or alley.

4.2.3 STREETS, ALLEYS, AND PARKING

Street networks define how buildings and properties are configured. The Baltimore hierarchy of streets ranges from busy regional arterials to quiet neighborhood streets and service-related alleys. The character and uses of each type of street within a neighborhood may be different. When undertaking any new construction or site improvement, assess the potential impact upon the character of individual streets and alleys.

- Retain historic street and alley alignments, widths, and configurations.
- Retain existing property lines, block patterns, and setbacks.

- Preserve historic street paving materials where they still exist even if the paving materials have been covered by later paving.
- Retain historic curbing wherever possible. Where replacement curbing is necessary, use salvaged or historically compatible materials. If replacing historic materials is determined not to be feasible, use a substitute that duplicates the durability, color, texture, and visual appearance of the original.
- Assess the potential impact of all street construction projects, including underground utility repairs, on adjacent historic landscapes and structures and implement protective measures.
- Many historic neighborhoods were not originally designed to accommodate automobiles, so the addition of driveways and large parking areas can detract from a neighborhood's historic character.
- Design new parking areas to be as unobtrusive as possible. In general, locate parking areas behind buildings, with access from alleys or secondary streets rather than from a principal street.
- Screen new, visible parking areas with shrub plantings, walls, or fences three to four feet high. This will mitigate the intrusion on the view while still providing security.
- Where new parking structures are required, their design should respond to the scale, texture, and rhythm of the associated historic district. Incorporate retail and other active ground level uses into the design when parking structures are located in a commercial area.
- New off-street parking should not be allowed to disrupt the continuity of front yards along a streetscape.
- Do not remove historic fabric to install a parking pad.
- Do not add a driveway where there is no historic precedent.
- The location of new driveways should be in keeping with the historic character of the neighborhood and the individual property.
- Avoid the removal of mature trees when installing a new driveway or parking pad.
- Utilize pervious paving surfaces whenever possible to minimize the visual impact and prevent runoff.

4.2.4 FENCES

- Repair historic fences using matching pickets, posts, and rails.
- Replace fences when they are deteriorated beyond repair using historic documentation, physical evidence including comparable examples in the neighborhood, or photographs.
- When in-kind replacement is not possible, a visually and physically compatible synthetic material may be used. Replicate elements in size, form, shape, texture, and appearance. Provide samples and product literature for approval.
- New fences must be compatible with the character, height, scale, design and material of comparable properties in the neighborhood.
    - In front yards or side yards visible from the street, wood or metal picket-type fences found in a number of styles are often appropriate.
    - In rear yards or side yards not visible from the street, vertical board, board-on-board and board-and-batten fences are appropriate.

    - Brick or stone walls may be appropriate in some locations.
    - Chain link, vinyl, stockade and split rail fences are typically not appropriate for use in Baltimore City historic districts.
- Fence location and orientation must be consistent with the historic location and the character of the property. A site plan with the location of the fence must be provided for approval.

4.2.5 SIDEWALKS AND WALKWAYS

Pedestrian sidewalks and walkways are significant features of historic neighborhoods that contribute to their overall character as well as to the safety and enjoyment of residents and visitors.

- Preserve sidewalk and walkway alignment, widths, and configuration within historic districts.
- Preserve historic paving materials where they still exist. Historic paving materials are not always brick or stone, and it should not be assumed that a concrete surface is not historic.
- Maintain existing sidewalks to prevent unsafe conditions such as tripping hazards. Repair minor cracking, heaving, or settlement by lifting and relaying paving materials on a new base of sand and gravel.
- Avoid the application of excessive de-icing salts on historic paving. Use alternative deicing materials such as sand, cat litter, or non-salt chemical deicers, such as calcium magnesium acetate.
- If the integrity of a historic masonry paving material fails, the preferred strategy is to document, remove, salvage, and re-lay the historic masonry paving materials in their original pattern and configuration.
- New or replacement paving, including accessibility features, should be consistent with the character and appearance of existing historic paving.

Figure 63: *Brick sidewalk and street trees maintain the historic rhythm of the streetscape.*

- It may be appropriate to alter existing historic sidewalks to accommodate new street trees or the expansion of the root zone for an existing tree.
- The addition of sidewalks and walkways within a historic district may be desirable to enhance pedestrian access and safety. New sidewalks and walkways should be compatible with the existing pedestrian circulation patterns.

4.2.6 ACCESSORY STRUCTURES

Design Guidelines for Accessory Structures are available in Chapter 1.

4.2.7 MONUMENTS AND PUBLIC ART

Baltimore, known as the Monumental City, has a rich history of public art. Markers, monuments, and sculpture serve a wide variety of purposes, including honoring military heroes or events,

remembering significant historical events, recognizing the contributions of individuals or groups, as well as enhancing public spaces. The preservation of public art shows the City's appreciation of its history and investment in its public landscapes.

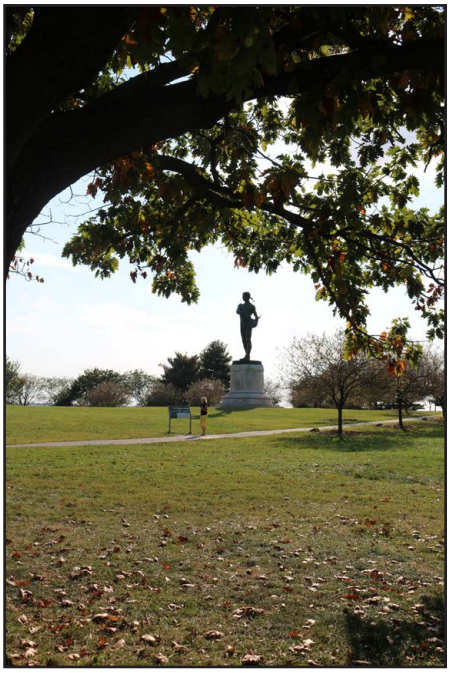


Figure 64: *View of Orpheus monument on the public grounds of Fort McHenry.*

- Preserve, protect, and maintain existing monuments and public art.
- Monuments and public art require special maintenance procedures. Regularly inspect monuments and public art for signs of deterioration. Always use the gentlest techniques possible for cleaning and repairs. Document how maintenance treatments weather over time. Consult a sculpture conservator when there are questions about treatment or unusual conditions.
- Maintain protective coatings, such as annual applications of paste wax for bronze and copper sculpture.
- On monuments and public art constructed of metal, remove graffiti as soon as possible. Use paint strippers and solvents that are recommended for the particular coating to be removed and the metal substrate to be treated. Follow manufacturer's instructions for all cleaning products.
- On monuments and public art constructed of masonry, do not use solvents or other chemical cleaners without proven past experience in their use on similar substrates and coatings.
- Maintain sound joints between masonry elements.
- Do not use a pressure washer to clean historic monuments and public art constructed of masonry.
- Site new monuments and public art to complement the existing site design. New monuments and public art should not disrupt the existing scale, landforms, or patterns of spatial organization.
- Art installed on or near historic buildings should not irreversibly alter the historic character of the building itself.

4.2.8 TREES AND OTHER PLANTINGS

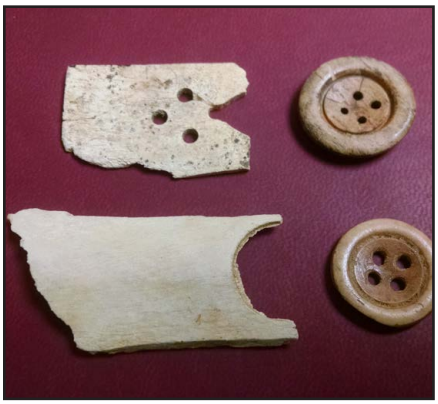
Trees and other plantings have a measurable positive impact on the urban environment. Baltimore streets were ornamented with trees as early as the eighteenth century and thousands of trees were planted in the nineteenth century as part of the early parks system. The spaces available for plant materials vary among districts. Many of Baltimore's rowhouse neighborhoods have narrow sidewalks with little or no space for vegetation. The downtown grid is enhanced by formal, central open spaces. Neighborhoods further away from the City center have small front yards and separations between buildings that may contain plantings. At the outer edges of the City, neighborhoods had still larger lawns, and even more space for trees, shrubs and perennial plantings. The preservation, maintenance, and establishment of trees and plantings should be a high priority.

- Preserve, protect, and maintain healthy trees in yards and along streetscapes.
- Consult with organizations such as the Baltimore Notable Trees Project, which inventories the City's largest and most historic trees, to increase awareness and protection of extraordinary trees.
- Prune or remove and replace trees if they threaten public safety, property, or utilities.
- Replace dead or diseased shrubs or trees with like species, unless the original species is now considered invasive or unsuitable for the site. New cultivars of street tree species often have similar traits but greater resistance to disease and higher tolerance for urban conditions than older cultivars.
- Under and near utility lines, choose tree cultivars with a maximum height at maturity of twenty-five feet.
- Trees may be added to any streetscape where there is space to sustain healthy growth and where they would not be in conflict with significant historic precedents.
- When planning park, yard or streetscape improvements, identify historic precedents for plantings. Consult historic photographs and general historic plant lists to determine compatible plant materials. Select tree and plant locations, sizes and species in keeping with these precedents.
- Some vines, if allowed to grow directly on stone, brick and wooden walls, may trap moisture and accelerate deterioration of the wall through disruptive clinging roots. If vines are desired, train vines onto trellises or other climbing structures.

4.2.9 LIGHTING

Site lighting provides nighttime orientation and enhances security. Lighting can also be used to identify district and park gateways, pedestrian walkways, and other key landscape features.

- Preserve and maintain surviving historic light fixtures.
- When installing new light fixtures, choose fixtures that complement the existing street furniture, buildings, and landscape in scale, finish, and style. Historic photographs can help inform the choice of new light fixtures. New light fixtures are available that reproduce a range of historic styles. Contemporary light fixtures may also be appropriate in some locations. If chosen, contemporary light fixtures should be simple, durable, and understated.
- Select finishes that are understated and work with the colors of adjacent street furniture, buildings, and paving. Dark colors are generally preferable.
- Provide the minimal street lighting levels necessary for public safety while avoiding light pollution. Direct lighting downwards to the ground and away from surrounding properties. Lamps should be shielded from direct view.
- On residential streets, install pedestrian-scale light fixtures (approximately nine feet high).



Clockwise from upper left: Artifacts from the Mount Clare collection, large ceremonial crystal from Mount Clare collection, storage at Baltimore City Archives, view of Mount Clare.

Chapter 5: Guidelines for Archeology

5.1 Archeological Features

Excavations that occur within interior spaces or as part of adjacent new construction may impact potential archeological resources. Archeological resources are most likely to be located under basement and kitchen floors. When undertaking excavation within a landmark interior, follow the general guidelines below:

- Make every reasonable effort to protect and preserve archeological resources affected by or adjacent to any project.
- Leave known archeological resources intact.
- Minimize ground disturbance to reduce the possibility of destroying unknown archeological resources. When ground disturbance is necessary, hire a qualified archeologist to monitor and document the excavation.

5.2 Archeological Resources

Archeological resources represent a wealth of historical information; disturbing them does irreversible damage to the City's archeological record and to its heritage. Every reasonable effort must be made to identify, protect, and preserve archeological significant resources. Work involving subsurface disturbance within historic districts and on the grounds of City landmark structures may require an archeological assessment report which shall include an inspection of the area proposed for subsurface disturbance, as well as a site map depicting the location of archeological sensitivity. The applicant may be required to submit an archeological survey by a professional archeologist whose qualifications meet the Secretary of the Interior Standards in the field of archeology.

- Leave known archeological resources intact, whenever possible.
- Avoid introducing heavy machinery or equipment into areas where their presence may disturb archeological resources, whenever possible.
- Avoid installing any materials, underground utilities, and other modern features that disturb archeological resources, whenever possible.
- Some of the most likely places to find artifacts on residential properties are privies, trash pits, and wells/cisterns, which can be located away from standing structures. Commercial or industrial and/or engineering structures, roads and railroads can also have significant archeological deposits.